




# BC HYDRO ANNUAL REPORT

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## ABOUT BC HYDRO'S ANNUAL REPORT

This report covers BC Hydro's performance for the period April 1, 2008, through March 31, 2009, and includes its major subsidiaries, Powerex Corp. and Powertech Labs Inc. The report was prepared for our shareholder, the British Columbia Provincial Government, and reflects BC Hydro's commitment to balance our business across three bottom lines: environmental, social and financial.

The performance targets referenced in this report were set out in our 2008/09 to 2010/11 Service Plan. The Service Plan provides a high-level, strategic look at our business and sets out the targets and measures by which our performance can be evaluated. Throughout the fiscal year, BC Hydro reports on our financial performance through a series of Quarterly Reports. This Annual Report is a look back at this year, incorporating information also found in our Service Plan and Quarterlies.

To meet the requirements for both annual and triple bottom line reporting, this report is in accordance with British Columbia's *Budget Transparency and Accountability Act*, and Canadian generally accepted accounting principles (GAAP). It is also in compliance with the Global Reporting Initiative (GRI) G3 Guidelines. The Global Reporting Initiative has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. This framework sets out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. In addition to the measures found in the Annual Report, a comprehensive list of performance data that supports our commitment is available in the GRI comparative index online at BC Hydro's website: [http://www.bchydro.com/about/company\\_information/reports/gri\\_index.html](http://www.bchydro.com/about/company_information/reports/gri_index.html).

*The photos and sidebars in this report are courtesy of **Keeping Current**, BC Hydro's online employee newsletter; **Plugged In**, the quarterly print publication that is mailed to employees and their families; and/or BC Hydro employees.*

**COVER PHOTO CREDIT:** Miguel Alvarez, Learning Technologies Leader, Field Operations  
Miguel's daughters dancing on the dock at Miner's Bay, Mayne Island



# CONTENTS

Message from the Chairman and President and CEO .....	4
Organization Overview.....	7
Corporate Governance .....	11
Report on Performance.....	16
Safety.....	20
People .....	23
Reliability (Customer) .....	28
Customer Satisfaction .....	33
Reliability (Supply) .....	36
Climate Change, Energy Conservation and Efficiency .....	41
Financial Targets .....	53
Financial Results.....	58
Management Discussion and Analysis .....	58
Consolidated Financial Statements.....	77
Financial and Operating Statistics .....	113
Operating Segment Information.....	117
Appendices .....	118
Alignment with Shareholder's Letter of Expectation .....	118
Government Expectations and Legislation .....	120
Guiding Principles .....	122
Information on Capital Projects .....	123
Information on Subsidiaries.....	126
Triple Bottom Line Reporting and the Global Reporting Initiative .....	127
Contact Information .....	128

# LETTER FROM THE CHAIRMAN AND PRESIDENT AND CEO TO THE MINISTER



ILI Mossadiq S. Umedaly, Chairman

TRJ Bob G. Elton, President and Chief Executive Officer

BC Hydro's 2009 Annual Report was prepared under the Board's direction in accordance with the *Budget Transparency and Accountability Act*, and in accordance with the Global Reporting Initiative G3 Guidelines.

This report represents a balanced presentation of BC Hydro's economic, environmental and social performance for the fiscal year ended March 31, 2009. All significant decisions, events and identified risks as of May 31, 2009, have been considered in preparing this report.

The information was prepared in accordance with the B.C. Reporting Principles and represents a comprehensive picture of our performance in relation to our 2008/09 to 2010/2011 Service Plan. The measures focus on aspects important to the company and are consistent with BC Hydro's values, purpose, goals and objectives.

The Board is responsible for ensuring internal controls are in place to measure and report on performance of the company in a timely fashion. This report contains estimates and interpretive information that represent the best judgment of management. Any significant limitations in the reliability of data are identified in the report.

## OUR PEOPLE: MAKING A DIFFERENCE

As this year's Annual Report will attempt to highlight, all of BC Hydro's achievements are dependent upon the dedicated and talented employees that work at our facilities and offices across the province in roles as wide-ranging as dam engineers, designers, power line technicians, financial and energy planning experts, and all those working to establish a culture of conservation across the province.

We have approximately 5,800 people working at BC Hydro. In the past five years we have hired about 2,000 people. We have deliberately sought more diversity. Our workforce is younger, comes from around the world, includes many more women, and we have a greater mix of private and public experience.

On behalf of the Board, we'd like to thank the entire BC Hydro staff for their dedicated service to our customers.

We'd also like to acknowledge the 20th anniversary of our Power Smart program, and the visionary leader who made it all possible, former BC Hydro Chairman and CEO, Larry Bell.

Once again, energy saved through our Power Smart programs surpassed expectations and continued to deliver cost-effective energy over the last fiscal year, producing cumulative energy savings of 983 GWh, an increase of 657 GWh over fiscal 2008. This increased saving is equivalent to powering over 65,000 homes for a year.

It was also a year highlighted by a world-wide economic downturn that affected our business. For example, our load forecast was adjusted downwards reflecting expectations of reduced economic activity, in particular to our industrial customers.

BC Hydro operates within a triple bottom line framework. This includes a balance between financial and non financial performance targets. In fiscal 2009, we met or exceeded 10 of 14 non financial targets, such as the improved all injury frequency, improved employee engagement, and steady customer satisfaction over the previous year. We did not meet our reliability (customer) targets, due to transmission and substation outages, a largely overhead system of lines which are susceptible to trees falling on them, and distribution equipment failure. However, BC Hydro's reliability is also impacted by aging assets, adverse weather due to the nature of where we live



and the changing climate. In addition to the 14 non financial targets, we also have 10 financial measures. We met four of these in fiscal 2009. BC Hydro's net income was \$366 million which is comparable to the previous year and exceeds target. BC Hydro was also able to provide a return on equity of 12 per cent to our shareholder which is similar to the Service Plan targets. The remaining six metrics were below target. These were related to debt levels coverage, interest coverage and operating costs.

Meeting those performance targets safely is one of the highest priorities at BC Hydro. In fact, our all-injury frequency rate for fiscal 2009 is a performance record and a significant improvement on what we had forecast. We have made progress on increasing this focus on safety by introducing to employees improved planning, identification of hazards, and putting appropriate barriers in place. We believe these improvements are having a positive impact on the improved injury rate; however, we will not be able to identify that this is the primary reason for the improvement until we have further information over time.

Sadly, BC Hydro experienced two employee fatalities in fiscal 2009. Dirk Rozenboom and Rob Lehmann, both power line technicians, were killed in May 2008 in a helicopter crash while conducting a transmission line patrol at Cranbrook. The pilot and a pedestrian on the ground were also killed in the accident.

In response, we have implemented some of the recommendations of our internal investigation, including more rigorous assessment of when to use helicopters.

## OUR PEOPLE: PLANNING FOR THE FUTURE

BC Hydro continues to be guided by the Province's 2007 BC Energy Plan: A Vision for Clean Energy Leadership. The Energy Plan calls on BC Hydro to meet two critical energy planning targets, which we have embedded in the Long Term Acquisition Plan (LTAP) that was filed with the British Columbia Utilities Commission (BCUC) in June 2008.

One of the targets is to become self-sufficient in energy and capacity by 2016. The other is to meet at least 50 per cent of our incremental resource needs through demand-side management by the year 2020. We are also ensuring that all new electricity projects have zero net greenhouse gas emissions, and that clean or renewable electricity continues to account for at least 90 per cent of total generation.

In fact, in the past fiscal year, clean or renewable generation accounted for 94 per cent of BC Hydro's electricity supply.

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the impacts of climate change.

Greenhouse gas emission reduction targets have been established for the first time in the 2009/10 to 2011/12 Service Plan.

Ensuring that we have adequate supply to meet customer demand is a core focus for BC Hydro. Many of BC Hydro's dams and power-generating facilities were constructed decades ago. Therefore, BC Hydro is improving the health of our assets. Capital investment on generation assets has grown from \$90 million in fiscal 2001 to \$365 million in fiscal 2009. This will continue over the next five years – and likely beyond – as large projects move into the expenditure-intensive implementation phase.

During fiscal 2009, BC Hydro placed into service the redeveloped Aberfeldie Generating Station, a new 24-megawatt generating station to replace the old five-megawatt plant constructed in 1922. The first energy flowed from the new station in December 2008. Another project underway is the upgrade to the Revelstoke Generating Station where we are adding a fifth generating unit that will yield 500 MW of additional generating capacity. We are also evaluating options to meet growing customer demand in the Fort Nelson area and assessing the opportunities for installing a fifth and sixth generating unit at our Mica Generating Station.

BC Hydro's overall strategy also includes buying energy. During fiscal 2009, BC Hydro made considerable progress in advancing three competitive call processes for Independent Power Producers – the Standing Offer Program, Bioenergy Call and Clean Power Call.

Longer term, BC Hydro is taking a stage-by-stage approach to the evaluation of Site C, a potential third dam and hydroelectric generating station on the Peace River. Work during Stage 2, Project Definition and Consultation, involved extensive consultation as well as project engineering, environmental studies and other technical reviews.

BC Hydro will make a recommendation to the provincial government in fall 2009 on whether to proceed to Stage 3 of the potential project. BC Hydro will also issue a public report highlighting key findings during Stage 2.

Significant regulatory activity continued for BC Hydro in fiscal 2009. The BCUC issued decisions on the fiscal 2009/2010 Revenue Requirements Application and the Residential Inclining Block Rate Application. The former will help us meet the increasing costs of doing business, while the latter is a two-step rate that went into effect in October 2008 to encourage conservation.

BC Hydro also submitted its 2008 LTAP to the BCUC and an oral hearing took place in March 2009. As part of the LTAP, BC Hydro filed a 20-year demand-side management plan, which is expected to close approximately three-quarters of the gap between forecast consumption and currently available supply. As part of the demand-side management plan, roughly half of the electricity savings are expected to come from Power Smart programs, 30 per cent from government codes and standards and 20 per cent from conservation rate structures.

In fiscal 2009, BC Hydro developed an industry leading Smart Grid framework to support a common understanding of the Smart Grid among utilities, and we are using it to guide our vision of the modern grid.

## OUR PEOPLE: STAYING CONNECTED

This was a pivotal year for BC Hydro in its efforts to foster relationships with aboriginal people in B.C. We concluded an agreement with Kwadacha First Nation and initialled an agreement with Tsay Keh Dene First Nation to address the historic social, economic and environmental impacts on their communities. We continue to consult with First Nations to understand and mitigate project impacts, and provide accommodation where appropriate.

As an official supporter of the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro will provide clean power for the events. The electrical infrastructure and operational support planning for 17 mountain and city venues are on schedule with nine of the venues connected and the remainder targeted to be completed by summer 2009.

Finally, like other employers faced with an aging workforce and a competitive external labour market, we continued to place a high priority on the attraction and retention of employees in fiscal 2009. However, our retirement eligibility remains a moderate concern with 25 per cent of our current workforce eligible to retire within the next five years.

With over a third of our workforce having less than two years of service and half with less than five years, our company is undergoing a significant demographic transformation. This is a challenge for BC Hydro but also an opportunity. Along with our seasoned veterans, these are the new faces that will be planning and implementing the initiatives just described, now and in the years ahead, to ensure future generations of British Columbians enjoy the same benefits of clean, low-cost, reliable power that we have enjoyed for decades.

Sincerely,



Mossadiq S. Umedaly

Chairman



Bob Elton

President and CEO

# ORGANIZATION OVERVIEW

## BC HYDRO'S STRATEGIC FRAMEWORK



## OUR MANDATE

BC Hydro is one of Canada's largest electric utilities. Our mandate includes to generate, manufacture, distribute, supply, purchase and sell electricity and meet the need in British Columbia in a cost-effective and reliable manner.

As a provincial Crown corporation, we receive guidance from the Province—as the shareholder—through several policy instruments, including a Shareholder's Letter of Expectations and the 2002 and 2007 Energy Plans. The government's expectations are expressed in three essential ways: legislation, policy and instructions.

**Legislation:** The most important longstanding piece of legislation governing BC Hydro is the *Hydro and Power Authority Act*, which gives us our mandate. Over the decades, the Act has been amended as BC Hydro's business operations have evolved. The creation of Powerex – to trade electricity – and the BC Transmission Corporation – to plan and operate the transmission system – reflect this evolution.

The *Utilities Commission Act* gives the British Columbia Utilities Commission (BCUC) the power to regulate BC Hydro to ensure that customers receive safe, reasonable, adequate and fair services. It also ensures that the government, as Shareholder, earns a fair return on its invested capital and that the competitive interests of B.C. businesses are not frustrated.

BC Hydro's assets also come under the terms of the *BC Hydro Public Power Legacy and Heritage Contract Act*. This act ensures public ownership of BC Hydro's Heritage Resources, which includes BC Hydro's transmission and distribution systems, and all of BC Hydro's existing generation and storage assets, and enabled the establishment of the Heritage Contract. The act also includes any future increases to the capacity and energy capability of these facilities.

**Policy:** The BC Energy Plan puts forward the government's vision and blueprint for the province's energy future. The most recent plan, released in 2007, "A Vision for Clean Energy Leadership", provides guidance to BC Hydro on how it should look to meet the future energy needs of British Columbians.

In particular, the BC Energy Plan sets a goal for BC Hydro to acquire 50 per cent of incremental resource needs through energy conservation and efficiency by 2020, while at the same time requiring that:

- all new electricity projects developed in B.C. will have zero net greenhouse gas emissions;
- existing thermal generation power plants will reach zero net greenhouse gas emissions by 2016;
- there will be zero greenhouse gas emissions from coal-fired electricity generation; and
- clean or renewable electricity generation will continue to account for at least 90 per cent of total provincial generation, placing B.C. among the top green jurisdictions in the world.

# ORGANIZATION OVERVIEW

The plan also commits B.C. to being electricity self-sufficient by 2016. To make energy security a reality, the plan directs BC Hydro to do several things including:

- establish a standing offer for projects up to 10MW, a clean power call, and a bioenergy call for Independent Power Producers; and
- under provincial direction, enter into initial discussions with First Nations, the Province of Alberta and communities to discuss the potential development of a new dam at Site C on the Peace River.

**Instructions:** Government guidance also comes in the form of instructions, such as the Shareholder's Letter of Expectations, which regularly sets out objectives for BC Hydro to achieve in areas such as accountability, cost effectiveness and performance. For more information on this legislation and the policy direction from the provincial government, see the Appendices.

## OUR PURPOSE AND VALUES

BC Hydro's purpose is to provide "Reliable Power, at Low Cost, for Generations." Our purpose, together with our vision outlined in our Guiding Principles, provides us with an enduring foundation for managing our business and allows us to develop and drive our core strategy of conserving, building and buying the electricity British Columbians need. At all times, our values of safety, accountability, integrity, service and teamwork guide our actions.

## OUR SHORT-TERM PRIORITIES AND GUIDING PRINCIPLES

For fiscal 2010, BC Hydro's Long-Term Goals, which were adopted along with our purpose, in 2004, have been renamed "Guiding Principles", recognizing that they are aspirational in nature. However, each of the Guiding Principles remain unchanged, and combined with our purpose and our five values, continue to provide the framework that governs how we operate. In this report, we will refer to the long-term goals as Guiding Principles.

We have also made two changes to our short-term priorities in the 2009/10 to 2011/12 Service Plan to better reflect our evolving focus and government directions. For fiscal 2010, we have:

- re-named Reliability [Supply] as Electricity Security [Supply], and
- formally established Climate Change and Environmental Impact as a separate short-term priority from Energy Conservation and Efficiency.

These changes will be reflected in our fiscal 2010 Annual Report. In this report, we will refer to the short-term priorities using the language laid out in the 2008/2009 to 2010/11 Service Plan. However, we will order the priorities to better reflect the changes that will occur in fiscal 2010.

## OUR CORE STRATEGY

BC Hydro's core strategy is to conserve, build and buy to provide the electricity British Columbians need. We are focussed on our short-term priorities and in taking action on the projects and initiatives that will make these goals a reality. Conserving is the first and best choice for us to meet B.C.'s forecasted electricity needs in the future. By helping customers be more efficient, use their power wisely, and ultimately use less, we can collectively lower the new supply that will be needed. The second way for us to meet B.C.'s needs is to build by making important reinvestments in our heritage hydroelectric assets and by exploring potential new large-scale investments, such as Site C, a third hydroelectric facility on the Peace River. The third part of our strategy is to buy more. Even though conservation is to meet over half of our future electricity needs, BC Hydro will still consider other cost-effective, made-in-B.C. resource options to meet the balance of our requirements. For more information on our strategy see the 2009/10 to 2011/12 Service Plan.





## CUSTOMERS

BC Hydro serves 95 per cent of B.C.'s population, delivering electricity safely and reliably at competitive rates to approximately 1.8 million customers. Eighty-eight per cent of our customer accounts are residential, with the remainder either commercial or industrial. Each of these three groups consumes roughly one third of the total electricity we supply.

## RATES AND REGULATION

The BCUC must approve the rates BC Hydro charges for electricity. The rates allow us to recover costs incurred in serving our customers, including earning a return on equity. Both the definition of equity and the method to determine an appropriate return on this equity are defined by Special Directions from the B.C. Government. The Special Directions require annual dividend payments to the B.C. Government of 85 per cent of our net income, adjusted for capitalized finance charges and related amortization, as long as our debt to equity ratio is not greater than 80:20. For more information on the regulatory process see page 55.

## WHOLLY-OWNED SUBSIDIARIES

### POWEREX CORP.

Powerex is a key participant in energy markets across North America, buying and supplying wholesale power, natural gas, ancillary services, financial energy products and, more recently, environmental products with an ever-expanding list of trade partners. Established in 1988, its energy marketing and trade activities help optimize BC Hydro's electric system resources and provide significant economic benefits to the people of British Columbia.

### POWERTECH LABS INC.

Powertech has been providing consulting and testing services to electric utilities, gas companies, automotive manufacturers and others since 1989. Powertech combines unique testing capabilities with multidisciplinary, expert technical staff to help clients solve energy related problems. Embarking on a new strategic direction in 2008, Powertech is focused on becoming a world class leader in implementing clean energy solutions to create value for BC Hydro and British Columbia.

## STRATEGIC PARTNERS

### BRITISH COLUMBIA TRANSMISSION CORPORATION

BC Hydro and British Columbia Transmission Corporation (BCTC) operate as two independent Crown Corporations. There are significant interdependencies between the two organizations as BCTC is responsible for planning, operating and managing BC Hydro's transmission system. The strong partnership between BCTC and BC Hydro continues to benefit our customers with a coordinated approach to system planning that ultimately provides them with reliable power.

### ACCENTURE BUSINESS SERVICES OF BRITISH COLUMBIA

BC Hydro implemented an outsourcing strategy with Accenture Business Services of British Columbia (ABSBC) under a 10-year agreement, effective April 1, 2003. On any given day, thousands of transactions are handled by ABSBC in the areas of Customer Care, Information Technology, Human Resources, Financial Systems and Building and Office Services. Together with ABSBC, BC Hydro has been able to improve performance, advance customer satisfaction and achieve total gross savings of approximately \$150 million to date.

### INDEPENDENT POWER PRODUCERS (IPPs)

BC Hydro's electricity procurement plays a critical role in reaching the BC Energy Plan's objective of achieving electricity self sufficiency by 2016, as well as meeting the B.C. Government's policy actions for maintaining competitive rates, clean or renewable electricity and the development of a vibrant and competitive IPP sector.

Currently, BC Hydro has 89 Electricity Purchase Agreements (EPAs) with IPPs, including four EPAs in non-integrated areas, representing about 14,400 GWh/year of energy purchases. Of these agreements, 48 projects are in operation with most of the remaining projects scheduled to reach commercial operation by the end of fiscal 2011. During fiscal 2009, IPPs provided almost 8,400 GWh of energy to the BC Hydro system, which accounted for about 14 per cent of total domestic electricity requirements. We will continue to collaborate with IPPs, customers, Government, BCTC and First Nations to improve the procurement process for electricity and to design competitive call terms and conditions. For more information on BC Hydro's Calls for Power, see page 40.

# CORPORATE GOVERNANCE

## DIRECTORS, OFFICERS AND EXECUTIVE OF BC HYDRO

The BC Hydro Board of Directors oversees the conduct of business and supervises Management, which in turn is responsible for the day-to-day operations of BC Hydro. Directors are appointed by the B.C. Government to bring special skills and experience to the Board's deliberations.

The Board's responsibilities include:

- ensuring there is a strategic and business planning process, and then reviewing, validating and endorsing a strategy for the Corporation and monitoring its implementation,
- ensuring effective controls and appropriate governance are in place as part of its Management oversight, and
- continuing to understand the principal risks associated with the Corporation's business and ensuring that the appropriate processes and systems are in place to mitigate risk.

BC Hydro regularly reviews and updates its governance framework to ensure the various components meet the corporation's ongoing business needs while being consistent with government's Guiding Principles on Crown Agency Corporate Governance.

The Board acts in accordance with the Best Practices Guidelines for Governance, and Disclosure Guidelines for Governing Boards of BC Public Sector Organizations, which can be found at [www.lcs.gov.bc.ca/brdo/governance/](http://www.lcs.gov.bc.ca/brdo/governance/).

## MEMBERSHIP OF BOARD OF DIRECTORS AND BOARD COMMITTEES

The Board of Directors of BC Hydro is composed entirely of individuals which are independent of management. Many of the Board's responsibilities are carried out by Committees of the Board, Task Groups, or Advisory Committees which make recommendations to the Board of Directors. These Committees and Task Groups are comprised entirely of Board Members.

The Board of Directors of BC Hydro's wholly-owned subsidiary, Powerex Corp., has appointed an Audit and Risk Management Committee composed of members of the Powerex Board of Directors.

Terms of reference for the Board and its Committees, the Chairman, the Chief Executive Officer and the Corporate Secretary are published on the BC Hydro website. The number of Board and Committee meetings in fiscal 2009 are set out in BC Hydro's corporate governance disclosure at [www.bchydro.com](http://www.bchydro.com). In addition to the number of Board and Committee meetings, Board responsibilities, Director biographies and Director attendance records are also disclosed.

## BOARD OPERATIONS

Subscribing to a principle of continuous improvement, board performance and its make-up is evaluated annually to ensure that the Board of Directors performs its due diligence and policy oversight role in the most effective manner. For more information on the Board's roles and responsibilities, visit [www.bchydro.com/about/company\\_information/board\\_committees.html](http://www.bchydro.com/about/company_information/board_committees.html).

## CODE OF CONDUCT

To promote awareness and understanding of the standards of conduct that BC Hydro expects we have a Director and Employee Code of Conduct, which includes information on avoiding conflicts of interest. For more information on BC Hydro's Code of Conduct visit [www.bchydro.com/about/company\\_information/code\\_of\\_conduct.html](http://www.bchydro.com/about/company_information/code_of_conduct.html).

## GOVERNANCE AND DISCLOSURE GUIDELINES FOR BRITISH COLUMBIA PUBLIC SECTOR BOARDS

Best Practice Guidelines on Governance and Disclosure were issued by government in 2005. BC Hydro's response to the 12 disclosure requirements is updated annually and posted on our website.

## ORGANIZATIONAL STRUCTURE - EXECUTIVE OF BC HYDRO

BC Hydro's organizational structure is designed to ensure we deliver on our Guiding Principles and to facilitate coordination among business functions. The structure includes operational business groups, a corporate function and two subsidiaries, Powerex and Powertech [see page 10 for more information on our subsidiaries]. As of March 31, 2009, we had 5,844 employees (regular and temporary employees, full-time count as one, part-time count as 0.5).





## BOARD OF DIRECTORS

**MANDATE:** The Board is responsible for overseeing the conduct of business, supervising management and ensuring all major issues affecting the Corporation are given proper consideration. The Board, through the Chief Executive Officer, sets the standards of conduct for BC Hydro and ensures the safety of its operations.

**CHAIRMAN:** Mossadiq Umedaly

**MEMBERS:** Chief Kim Baird (appointed April 10, 2008), James Brown (appointed June 6, 2008), Peter Busby (appointed April 10, 2008), Wanda Costuros, Jonathan Drance (appointed May 8, 2008), Tracey McVicar, Nancy Olewiler, Peter Powell (appointed May 8, 2008), Walter Saponja, Donald Triggs (appointed June 6, 2008)

Brenda Eaton (resigned December 18, 2008)

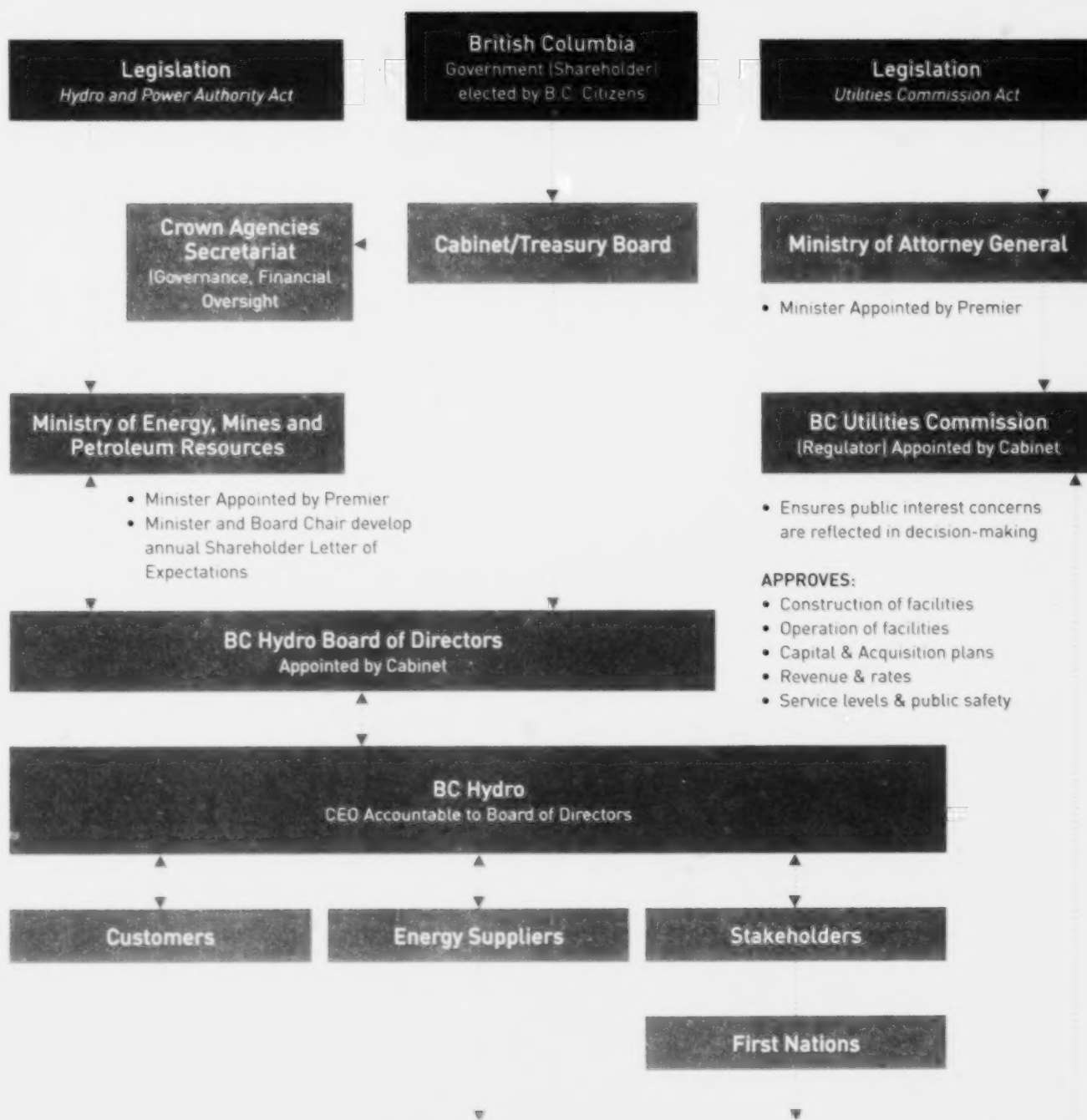
	COMMITTEES OF THE BOARD
EXECUTIVE COMMITTEE	<p><b>PURPOSE:</b> The Executive Committee meets only in special circumstances. It has most of the powers of the Board to act in situations when, for timing reasons, a Board meeting cannot be scheduled.</p> <p><b>CHAIRMAN:</b> Mossadiq Umedaly</p> <p><b>MEMBERS:</b> Wanda Costuros, Jonathan Drance (appointed November 19, 2008) Brenda Eaton (resigned December 18, 2008)</p>
AUDIT AND RISK MANAGEMENT	<p><b>PURPOSE:</b> The Audit and Risk Management Committee assists the Board in fulfilling its obligations and oversight responsibilities relating to the audit process, financial reporting, the system of corporate controls, governance of the Corporation's pension plans, and various facets of risk management.</p> <p><b>CHAIR:</b> Tracey McVicar</p> <p><b>MEMBERS:</b> Wanda Costuros, Peter Powell, Walter Saponja, Mossadiq Umedaly*</p> <p>Nancy Olewiler (no longer a Committee Member, November 19, 2008), Brenda Eaton (resigned December 18, 2008)</p>
CORPORATE GOVERNANCE	<p><b>PURPOSE:</b> The Corporate Governance Committee assists the Board by ensuring that BC Hydro develops and implements an effective approach to corporate governance, which enables the business and affairs of the Corporation to be carried out, directed and managed with the objective of enhancing shareholder value.</p> <p><b>CHAIR:</b> Jonathan Drance</p> <p><b>MEMBERS:</b> Tracey McVicar (appointed November 19, 2008), Donald Triggs (appointed November 19, 2008), Mossadiq Umedaly*</p> <p>Wanda Costuros (no longer a Committee Member, November 19, 2008), Brenda Eaton (resigned December 18, 2008)</p>
HUMAN RESOURCES	<p><b>PURPOSE:</b> The Human Resources Committee assists the Board in fulfilling its obligations relating to human resources and compensation issues, related specifically to senior management and generally to the Corporation. The Committee also monitors safety performance.</p> <p><b>CHAIR:</b> Nancy Olewiler</p> <p><b>MEMBERS:</b> James Brown (appointed November 19, 2008), Jonathan Drance (appointed November 19, 2008), Donald Triggs (appointed November 19, 2008), Mossadiq Umedaly*</p> <p>Chief Kim Baird (no longer a Committee Member, November 19, 2008), Walter Saponja (no longer a Committee Member, November 19, 2008),</p>
CAPITAL PROJECTS formed: November 19, 2008	<p><b>PURPOSE:</b> The Capital Projects Committee assists the Board in fulfilling its obligations and oversight responsibilities relating to the Corporation's long-term capital plans, capital budgets and capital projects, including risk identification and management, dam safety, Aboriginal Relations and negotiations, and transmission projects.</p> <p><b>CHAIR:</b> Walter Saponja</p> <p><b>MEMBERS:</b> Chief Kim Baird, Jonathan Drance, Peter Powell, Mossadiq Umedaly*</p>

# COMMITTEES OF THE BOARD *continued*

<b>CONSERVATION COMMITTEE</b> (Task Group)	<p><b>PURPOSE:</b> The Conservation ad hoc task group of the Board of Directors assists the Board by monitoring and supporting the implementation of an energy conservation strategy as described by the BC Energy Plan.</p> <p><b>CHAIR:</b> Peter Busby</p> <p><b>MEMBERS:</b> Chief Kim Baird (appointed November 19, 2008), Nancy Olewiler, Mossadiq Umedaly* Brenda Eaton (resigned December 18, 2008)</p>
<b>THE PEACE RIVER / WILLISTON RESERVOIR ADVISORY COMMITTEE</b>	<p>The Board appoints Advisory Committees from time to time. This Advisory Committee provides advice and facilitates two-way communications between the Peace/Williston community and BC Hydro. Committee membership is composed of local community leaders, providing equitable representation from geographical and special interest groups within the region.</p> <p><b>CHAIR:</b> Jack Weisgerber</p> <p><b>MEMBERS:</b> Lori Ackerman (Fort St. John), Rick Hopkins (Fort St. John), Gwen Johansson (Hudson's Hope), Terry Johnson (Taylor), Kevin Neary (MacKenzie), Leigh Summer (Hudson's Hope), Ron Terlesky (MacKenzie), Donny Van Somer (Kwadacha First Nation)</p> <p>Don Bourassa (Dawson Creek) (resigned February 18, 2009), Chief Johnny Pierre (Tsay Keh Dene First Nation) (no longer on Committee due to Tsay Keh Dene leadership change, November 2008)</p>
<b>POWEREX CORP.</b> Board meetings: 5 Audit and Risk Management Committee: 5 Strategy session: 1	<p style="text-align: center;"><b>SUBSIDIARIES</b></p> <p><b>CHAIR:</b> Wanda Costuros</p> <p><b>BOARD MEMBERS:</b> James Brown (appointed November 19, 2008), Bob Elton, Peter Powell, Walter Saponja, Mossadiq Umedaly (appointed July 2, 2008)</p> <p><b>OFFICERS:</b> Wanda Costuros (Chair), Teresa Conway (President and CEO), Michael Standbrook (Acting Chief Financial Officer, term ended March 6, 2009), Myra Watson (Corporate Secretary, resigned August 29, 2008), Diana Seehagen (Assistant Corporate Secretary, resigned September 26, 2008), Michael Lee (Acting Corporate Secretary, October 9, 2008 to March 31, 2009)</p>
<b>POWERTECH LABS INC.</b> Board meetings: 7	<p><b>EXECUTIVE CHAIRMAN:</b> Mossadiq Umedaly</p> <p><b>BOARD MEMBERS:</b> Brenda Eaton, Nancy Olewiler</p> <p><b>OFFICERS:</b> Mossadiq Umedaly (Executive Chairman), Eamonn Percy (President and Chief Operating Officer), Myra Watson (Corporate Secretary, resigned August 29, 2008), Diana Seehagen (Assistant Corporate Secretary, resigned September 26, 2008), Michael Lee (Acting Corporate Secretary, October 9, 2008 to March 31, 2009)</p>

\*The Board Chairman is an ex officio member of all Committees.

# SHAREHOLDER-REGULATORY RELATIONSHIP FRAMEWORK



# REPORT ON PERFORMANCE

This section reports on our short-term priorities and targets as outlined in the 2008/09 to 2010/11 Service Plan. Each of our Guiding Principles remain unchanged, and combined with our purpose and five values, continue to provide the framework that governs how we operate. For our short-term priorities, we assign specific targets and measures to assess progress. All of BC Hydro's 15 Guiding Principles including the short-term priorities are referenced in the Appendices.

Short-Term Priorities	Description
<b>Safety</b>	To provide the safest work environment compared with the best performers in any industry, where none of our employees will experience a serious safety injury.
<b>People</b>	To be the top employer for generations and to use exceptional teamwork to engage all employees.
<b>Reliability (Customer)</b>	To provide electricity self-sufficiency (energy and capacity) in B.C. for meeting all domestic needs, and to have the best-in-class reliability by customer segment.  <i>For fiscal 2010, the priority of Reliability (Customer and Supply) has been separated. This section will be called Reliability (Customer). The Reliability (Supply) portion is reflected below.</i>
<b>Customer Satisfaction</b>	To lead by offering extraordinary value and service.
<b>Reliability (Supply)</b>	To provide electricity self-sufficiency (energy and capacity) in B.C. for meeting all domestic needs, and to have the best-in-class reliability by customer segment.  <i>For fiscal 2010, the priority of Reliability (Customer and Supply) has been separated. This section will be called Electricity Security (Supply).</i>
<b>Climate Change, Energy Conservation and Efficiency</b>	To develop and foster an energy conservation and efficiency culture in B.C. that utilizes technology to lead customers to choose a dramatic and permanent reduction in the use of electricity.  <i>For fiscal 2010, this priority has been separated into Energy Conservation and Efficiency, and Climate Change and Environmental Impact.</i>
<b>Financial Targets</b>	To maintain the existing position of having costs among the lowest in North America and to deliver 100 per cent of forecast net income on an annual basis.

## HOW WE MEASURE OUR PERFORMANCE

BC Hydro uses a series of measures to guide business performance and progress. Some of these measures are tracked monthly, while others are tracked quarterly, semi-annually and annually. BC Hydro continues to develop leading measures where practical to determine if progress on meeting our goals is on track and to identify where adjustments need to be made. Measures are results-based to provide a more accurate evaluation on our performance. We also participate in benchmarking studies to determine where improvement may be required.



# A LOOK BACK ON PERFORMANCE FOR FISCAL 2009

Guiding Principles	Performance Measure	F2007 Actual	F2008 Actual	F2009 Target	F2009 Actual	F2010 Target	F2011 Target	F2012 Target
SAFETY	<b>Severity</b> (Number of calendar days lost due to injury per 200,000 hours worked)	31	39	25	32	23	20	17
	<b>All Injury Frequency</b> (Number of employee injury incidents per 200,000 hours worked)	2.4	2.8	2.4	1.4	2.3	2.2	2.0
PEOPLE	<b>Vacancy Rate (%)</b>	9.0	8.7	9.9	6.9	8.0	8.0	7.6
	<b>Employee Engagement</b> (mean score out of five on the Employee Engagement Survey)	NR	3.32 <sup>1</sup>	3.55	3.61	3.60	3.65	3.65
RELIABILITY (CUSTOMER)	<b>CAIDI (hours)</b>	2.16	2.24	2.15	2.47	2.15	2.15	2.15
	<b>SAIFI (frequency)</b>	1.33	1.52	1.31	1.67	1.27	1.22	1.22
	<b>CEMI-4 (%)</b>	7.30	8.56	9.00	11.57	8.50	8.00	8.00
CUSTOMER SATISFACTION	<b>CSAT Index</b> (% of customers satisfied or very satisfied)	NR	90	80	90	80	80	80
	<b>Billing Accuracy</b> (% of accurate bills)	98.5	98.5	98.2	98.5	98.2	98.2	98.2
	<b>First Call Resolution</b> (% of customer calls resolved first time)	NR	71	66	75	66	66	66
RELIABILITY (SUPPLY)	<b>Winter Generation Availability Factor (%)</b>	96.2	94.9	96.2	96.4	96.3	96.4	96.4
ENERGY CONSERVATION & EFFICIENCY	<b>Demand Side Management</b> (GWh/year, cumulative since F2008)	NR	326	761 <sup>2</sup>	983	1,700	2,600	3,800
CLIMATE CHANGE & ENVIRONMENTAL IMPACT	<b>Clean Energy (%)</b>	NR	94	90	94	90	90	90
	<b>Greenhouse Gas Emissions</b> (million tonnes CO <sub>2</sub> e)	NR	1.50	1.60	1.47	1.55	1.50	1.45

A LOOK BACK ON PERFORMANCE FOR FISCAL 2009 *continued*

Guiding Principles	Performance Measure	F2007 Actual	F2008 Actual	F2009 Target	F2009 Actual	F2010 Target	F2011 Target	F2012 Target
FINANCIAL	<b>FINANCIAL EFFICIENCY</b>							
	<b>Net Income</b> (After Regulatory Accounts) (\$ in millions)	407	369	358	366	452	493	542
	<b>Return on Assets (%)</b>	6.9	5.2	5.6	2.6	5.2	5.5	5.5
	<b>Return on Regulatory Equity (%)</b>	13.44	11.33	11.78	11.75	13.05	13.05	13.05
	<b>EBIT Interest Coverage</b>	1.85	1.49	1.41	0.78	1.56	1.57	1.52
	<b>Debt to GAAP Equity (%)</b>	80	80	80	81	80	80	80
	<b>OPERATIONAL EFFICIENCY</b>							
	<b>Operating Costs<sup>1</sup> (non-fuel)/MWh Delivered (\$)</b>	11.76	11.14	12.27	13.27	15.08	14.60	15.13
	<b>Operating Costs<sup>2</sup> (non-fuel)/Transmission and Distribution Line km (\$)</b>	8,401	8,057	8,973	9,251	10,610	10,261	10,526
	<b>Operating Costs<sup>3</sup> (non-fuel)/Customer (\$)</b>	362	344	377	387	440	442	429
	<b>Operating Cash Flow Post Dividend to Net Capital Expenditure (%)</b>	32	47	40	44	44	36	37
	<b>Transmission and Distribution Capital Expenditure/ Transmission and Distribution Line km (\$)</b>	7,309	8,597	13,711	12,317	12,192	12,825	11,712

<sup>1</sup> The fiscal 2008 employee engagement actual has been changed from 3.36 to 3.32 to account for slightly revised calculation methodology that occurred with the fiscal 2009 survey.

<sup>2</sup> The fiscal 2009 target set out in the fiscal 2008/09 - F2010/11 Service Plan was rounded to 700 GWh/year. The target shown above for fiscal 2009 was included in the 2008 LTAP filing and represents the actual target.

<sup>3</sup> Operating costs exclude DSM, Site C and other regulatory expenditures as these are not related to efficiency, and exclude any fuel associated with the cost of energy.

## NEW SERVICE PLAN MEASURES FOR FISCAL 2010

BC Hydro uses a variety of measures to guide business performance and progress and to evaluate whether a particular short-term priority is on track. We review our reporting framework regularly to ensure we maintain a comprehensive overview of our performance. For fiscal 2010, we will be reporting on all the metrics noted on pages 17 and 18. In addition, we will be adding one new metric within the Climate Change and Environmental Impact short-term priority:

### CARBON NEUTRAL PROGRAM EMISSIONS

(thousand tonnes CO<sub>2</sub>e)

	F2010	F2011	F2012
Target	25.5	25.0	24.1

The Carbon Neutral Program Emissions metric includes carbon dioxide equivalent (CO<sub>2</sub>e) emissions from vehicle fleet fuel combustion, building heating and cooling, building electricity use, and paper consumption, in accordance with the Province's guidelines for Crown corporations.

# SAFETY



## GUIDING PRINCIPLE:

To provide the safest work environment compared with the best performers in any industry where none of our employees experience a serious safety injury.

*The Safety Practices Committee (SPC) has members from across BC Hydro. They are the governing authority over our Safety Practice Regulations (SPRs). The SPRs are the main set of rules which govern workers who access and work on the power system. Safety Practices Committee (Left to Right): Glen Peters, Terry Receveur, Eric Nadin, Steve Fowles, Bob Hirschfield, Jan Kehl (resigned from Committee, May 7, 2009), Bruce Misewich and Donna Barker.*

BC Hydro recognizes that the operation of the electrical power system is hazardous and the risks must be actively managed to protect people, property and the environment. We mitigate the impact of these hazards by identifying them, implementing barriers and using quality safety design, construction, maintenance and education programs to protect against them.

In fiscal 2009, we made great strides in terms of looking for ways to prevent incidents from happening through our Safety by Design, Job Planning, Job Observation and Incident Investigation programs. Based on our dam safety audits, we have world-leading dam safety practices. In terms of our Service Plan targets, we were successful in achieving a low All Injury Frequency rate, the lowest ever for BC Hydro.

Delivering electricity safely also involves keeping a well-maintained electrical system and deterring an array of threats, such as vandalism and theft, while anticipating and responding to the impacts of natural disasters such as storms, floods and forest fires through emergency planning and preparations.

## STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on a reduction in the frequency of serious work-related injuries by:

- identifying hazards and eliminating them where possible, and
- managing and controlling hazards through the use of barriers, procedures and other measures when hazards cannot be eliminated, to minimize the risks to our employees.



# SAFETY

## EMPLOYEE SAFETY

In fiscal 2009, we continued applying safety by design principles to our standards and at our facilities. We also continued to actively identify hazards through more effective job planning. Through workshops, we introduced the concepts of hazards and barriers to Operations and Engineering employees. We also began using Tripod Beta, an advanced investigation tool that helps to identify potential accident causes that evade traditional methodologies, and to rigorously investigate incidents as a means of preventing future ones.

Sadly, BC Hydro experienced two employee fatalities in fiscal 2009. Dirk Rozenboom and Rob Lehmann, both power line technicians, were tragically killed in May 2008 in a helicopter crash while conducting a transmission line patrol in Cranbrook. The pilot and a pedestrian on the ground were also killed in the accident. The internal investigation report into the May 2008 Cranbrook helicopter crash has been completed and posted internally. While the Transportation Safety Board has not publicly released their investigation report, we have implemented some of the recommendations, including more rigorous assessment of when to use helicopters. We have worked with our industry peers to identify and leverage best practices, and are adopting a risk assessment model similar to that used by Southern California Edison.

On September 13, 2008, there was a severe electrical contact incident in Invermere involving two BC Hydro power line technicians, resulting in serious injuries to the employees. BC Hydro has presented and submitted our investigation report to WorkSafeBC regarding the Invermere incident. WorkSafeBC will now review our report, including our findings and corrective action plan, and finalize their independent investigation.

## INJURY STATISTICS

The all injury frequency (AIF) rate of 1.4 for fiscal 2009 is a BC Hydro performance record and significantly improves on our target of 2.4. The majority of the incidents this fiscal year were minor and did not represent a serious long-term risk to employees. We have increased our focus on safety by introducing employees to improved planning, identification of hazards, and putting appropriate barriers in place. We believe these improvements are having a positive impact on the much improved injury rate; however, we will not be able to identify that this is the primary reason for the improvement until we have further information over time.

With respect to injury severity, we did not meet our target of 25 [number of calendar days lost due to injury per 200,000 hours worked], mainly as a result of the Invermere incident and a small number of vehicle-related injuries that contributed a significant number of lost days to the total. We believe that continued emphasis on the elimination of high-risk hazards and continued focus on hazards and barriers as mentioned above will lead directly to a reduced severity rate over time.

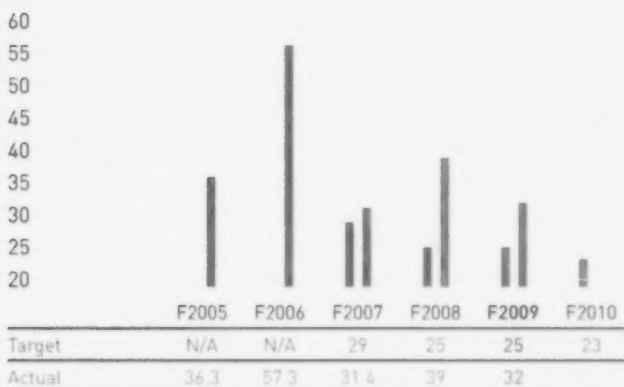


*In fiscal 2009, the Fort Nelson Generating Station received a Gold Merit Certificate from the BC Safety Council. The employees at the natural-gas fired generating facility were awarded the distinction for reaching 115,980 hours with no lost time to accidents for a facility of its size. Photo credit: James Norcross, Plant Manager, Fort Nelson Generating Station.*

# SAFETY

## SEVERITY

Number of days lost due to injury per 200,000 hours worked  
lower is better



Severity is a standard Canadian Electricity Association (CEA) measure and is defined as the number of calendar days lost due to injury per 200,000 hours worked. The Severity metric does not include data on fatal incidents. One or two injuries can have a major impact on severity and in fiscal 2009, the two injuries resulting from the Invermere incident did significantly raise the Severity result.

We recognize that severity does not appear to be improving. Once we have reduced the serious injury frequency over the next two to three years, we will shift our focus to less serious and minor injuries. We expect AIF and Severity will then start to reduce more quickly. For comparison, in 2007 the CEA composite AIF was 3.0 while Severity was 16.

## PUBLIC SAFETY

Public awareness, education and training are significant components of BC Hydro's efforts to manage public safety risks. We focus our electrical safety awareness and education efforts primarily on trades workers, first responders, youth, and the general public.

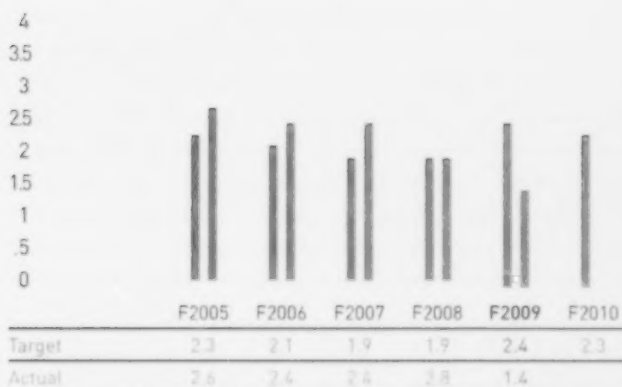
In fiscal 2009, BC Hydro delivered 151 presentations to more than 2,900 trades workers and 52 presentations to over 900 first responder personnel (firefighters, police, paramedics), including 11 'Electrical Safety for Firefighters' train-the-trainer workshops. The enhanced electrical safety materials will be delivered by fire training officers to firefighters as part of their core safety training. For information on our safety education programs see page 45.

## TECHNOLOGY

Using advanced technology to help us create a safer work environment, achieve our conservation and environmental goals and improve our systems performance is also a focus of BC Hydro. An example is the BC Hydro Robotic Pole Manipulator. An initial Live Line Automation investigation of our work on overhead power lines was conducted in fiscal 2008 and produced recommendations for line worker safety and ergonomic improvements. In addition to direct benefits, there is a compelling argument to be made that the safety benefits achieved through improving ergonomics extend to broadening the available labour pool. For example, current power line technician work methods and tools exclude 50 per cent of male and 90 per cent of female applicants given the physical requirements of the job. The Robotic Pole Manipulator is targeting a reduction in injuries from pulling, hoisting and lifting, which account for the highest percentage of injuries at 18%. The goal of the project is to remove workers from handling the pole altogether, which also reduces the chance of a more severe injury.

## ALL INJURY FREQUENCY

Number of injuries per 200,000 hours worked  
lower is better



All Injury Frequency (AIF) is also a standard CEA measure and is defined as the total number of employee Medical Treatment and Lost Time Injuries occurring in the last 12 months per 200,000 hours worked. Medical Treatment Injuries are those where a medical practitioner has rendered services beyond the level defined as "first aid" and the employee was not absent from work after the day of the injury.

Both AIF and Severity metrics, as defined in the CEA Standard, are generally harmonized with the U.S. Occupational Safety and Health Administration Standards for safety statistics.

## PEOPLE



### GUIDING PRINCIPLE:

To be the top employer for generations and to use exceptional teamwork to engage all employees.

*Lyla Verreck, Director of Aboriginal Relations and Negotiations, holding the Seeds of Equality 2009, at BC Hydro's announcement of its involvement with Roots of Empathy, a not-for-profit organization dedicated to teaching emotional literacy and empathy to children.*

Like other employers faced with an aging workforce and a competitive external labour market, we continued to place a high priority on the attraction and retention of employees in fiscal 2009. The global economic slowdown started to ease some of the pressures of the skilled labour shortages we have experienced in previous years. Our rate of attrition also slowed as the year progressed and this facilitated the retention of some of our experienced workers to assist with the mentoring, training and knowledge transfer from their roles to newer employees. However, our retirement eligibility remains a moderate concern with 25 per cent of our current workforce eligible to retire within the next five years.

Over the last five years, we've increased our representation of both women (by 20 per cent) and visible minorities (by 40 per cent) working at BC Hydro. The make up of our workplace is changing and growing younger - just over 40 per cent of our workforce is made up of those born since 1964, with those born since 1981 making up the fastest growing segment of our workforce.

However, with over a third of our workforce having less than two years of service and half with less than five years, our company is undergoing a significant demographic transformation. This has required a balance of leveraging and retaining the skills and experience of our legacy workforce with the effective onboarding, leadership development and job-related training of our newer staff to ensure they have the tools, skills and support to perform well in their roles.

### STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN

In last year's Service Plan, we stated we would:

- manage need by continuing to improve organization-wide workforce planning and forecasting capability as well as pursue job redesign, skills upgrading and retraining to support the introduction of new technology;
- expand talent by deploying our targeted outreach sourcing strategy and Aboriginal Education and Employment strategy to attract a more diverse workforce and by increasing our focus on international recruiting for hard to fill positions;
- attract talent by hiring early replacements for critical roles to allow for knowledge transfer as well as continuing to leverage our Employee Referral Program;
- grow talent by continuing to strengthen our leadership team through a focus on leadership coaching and development, succession planning and career pathing and by expanding our apprentice and trainee programs; and
- retain talent by delivering consistent and timely employee on boarding and orientation programs, conducting a review of our Total Rewards programs (which includes base pay, variable pay, benefits, pension and other related incentive programs) and further involving our people in "once in a lifetime" opportunities and challenges, including addressing the energy gap and supporting the Vancouver 2010 Olympic and Paralympic Winter Games.

# PEOPLE

The following changes have been made to these strategies in this fiscal year: we now attract talent by hiring for critical roles in advance of retirements to facilitate knowledge transfer and we leverage not only the employee referral program but also more extensive employee networks for referrals.

In fiscal 2009, we focussed on a variety of programs and initiatives to source, develop and retain our workforce talent:

- We promoted our employment brand in our internal and external communications and emphasized our focus on diversity, sustainability, and our core values.
- We communicated the value of our compensation and benefits package to existing employees and prepared a three-year implementation plan to refresh our Total Rewards philosophy and strategy.
- We implemented a cost neutral workforce plan initiative for our skilled trades people that will reduce overtime and usage of contractors, provide flexible movement of work between job types and better enable the safe and timely maintenance of our capital infrastructure.
- We launched the Bright Futures outreach program with the Electricity Sector Council to promote career interest in the sector for B.C. high school students and teachers.
- We streamlined business processes in recruitment and performance management and improved web-based access to human resources information.
- We supported employee-led career and skills development workshops and events organized by the BC Hydro Women's Network and the Hydro Employees' Multicultural Society.
- We conducted an enterprise-wide review of our training functions and courses and have developed a new governance and systems strategy. These initiatives will improve the accessibility and effectiveness of our training and development offerings across the company. Training programs offered this year included new programs for our operations trainees, as well as driver safety and procurement training.

## VACANCY RATE

Percentage – lower is better

	F2007	F2008	F2009	F2010
Target	NR	10.2	9.9	8.0
Actual	8.2	8.7	8.8	
Number of Employees	4,546	5,185	5,844	

Vacancy Rate is a high level indicator of an organization's people management, which includes its reputation and competitiveness as an employer, level of employee engagement, staff turnover and the effectiveness of workforce planning and recruitment processes. The vacancy rate is subject to considerable variation based on factors such as organizational growth, internal personnel movement, employee demographics and external market conditions. As such, it must be interpreted within the context of the timeframe being measured. Vacancy Rate is calculated as a percentage of the number of vacancies in progress (replacement or additional positions actively being recruited internally and externally) to the sum of BC Hydro's headcount plus the number of vacancies in progress (less seasonal roles). The year-end result is calculated by averaging the month end rates at the end of each quarter.

## EMPLOYEE ENGAGEMENT

Mean Score (out of five) – higher is better

	F2006	F2007	F2008	F2009	F2010
Target	NR	3.68	3.55	3.60	
Actual	3.68	3.68	3.61		

\*fiscal 2008 and fiscal 2006 actuals adjusted for comparative purposes.

BC Hydro conducts an employee survey on a yearly basis to measure overall engagement levels within our workforce based on questions related to motivation, resources, alignment and capability.

The level of employee engagement is indicative of both employee satisfaction and productivity across the company. The increase in the employee engagement score from 3.32 in fiscal 2008 aligns with the additional focus on having enough people, managing performance well, explaining BC Hydro's decisions and building teamwork across business groups. The number of employees participating in the survey also increased significantly from 66% in fiscal 2008 to 83% this year.

Benchmark Performance – BC Hydro compares its engagement results to those published by WorkCanada for the Energy/Utilities industry sector. BC Hydro's employees had a 10 per cent higher favorable response ratio when compared the WorkCanada Energy/Utilities index on similar questions (BC Hydro 69.5 per cent vs. industry index 59.9 per cent).

# ORGANIZATION AND SKILL DEVELOPMENT

This year we focused on refreshing and updating our industry-recognized leadership development programs. In fiscal 2009, nearly 500 employees participated in our leadership programs, bringing the total to close to 2,000 employees since we introduced the first program in 2005.

In the continuous development of our future workforce in critical roles across the company, we maintained our successful trainee programs for Managers and Professionals in Development, Engineers in Training, Graduate Technologists in Training, Managers in Training, as well as our Student Co-op, Apprenticeship and Trades Trainee programs.

# PEOPLE

## FIRST NATIONS

This was a pivotal year for BC Hydro in its efforts to foster relationships with aboriginal people in B.C. and to build a foundation for sustainable, long-term relationships with our aboriginal partners and neighbours. The BC Court of Appeal provided greater clarity around the role of the BCUC in assessing the adequacy of First Nations consultation. We will continue to work to ensure that the honour of the Crown, including the duty to consult with First Nations, is upheld.

BC Hydro concluded an agreement with the Kwadacha First Nation and initialled an agreement with the Tsay Keh Dene First Nation to address the historic social, economic and environmental impacts that the construction and operation of our Peace region facilities had on their communities.

We underwent an external evaluation of our aboriginal relations initiatives under the Canadian Council for Aboriginal Business (CCAB) and were awarded a Silver designation under their Progressive Aboriginal Relations program. As the first utility company in Canada to participate in this program, this recognition confirms that our strategy to ensure lasting benefits to the aboriginal communities in which we work is effective. For example, we were recognized for our innovative approach to relationship management through the development of Key Account Managers for First Nations communities, similar to the model used with major commercial and industrial customers.

We continue to consult with First Nations to understand and mitigate project impacts, and provide accommodation where appropriate.

BC Hydro continues to build strategic relationships with other organizations to promote aboriginal economic development, wellness, youth sport and leadership. At the Business Council of B.C.'s Corporate Social Responsibility Summit last fall, we shared how our aboriginal relations initiatives were aligned with the company's long-term goals. We announced our partnership with Roots of Empathy, a not-for-profit organization dedicated to teaching emotional capacity and empathy in children, and have committed to support this program in interested aboriginal communities with which we work.

We were honoured to be a founding sponsor of the 2008 North American Indigenous Games and its legacy program to promote aboriginal youth sport in B.C., and a founding sponsor of the B.C. Aboriginal Business Awards, a celebration of the achievements of aboriginal businesses in B.C. We continue to support the Minerva



*The BC Hydro Managers and Professionals in Development (MPID) program builds a diverse talent pool of future organizational leaders. The MPID program provides exceptionally talented individuals with two years of rotation experience across the company where they are expected to learn, add value and provide leadership. The MPIDs from 2008/2009 met with Bob Elton, President and CEO, during a training session in Vancouver.*



*In this photo, a BC Hydro crew installs Power Smart lighting over two Chemainus First Nation soccer fields. This provides bright, safe lighting for community recreation and saves energy by using 54 per cent less energy than the standard lighting used on sports fields. The field is now so popular the First Nation reports they have to do additional maintenance so the field can handle the high demand.*



# PEOPLE

Foundation's work to empower Aboriginal women and promote cross-cultural communication. Our Aboriginal Procurement Strategy is fully implemented, and provides economic opportunities to aboriginal businesses. BC Hydro also exceeded our annual targets to hire aboriginal employees under our Aboriginal Employment and Education Strategy.

## COMMUNITY RELATIONS

Keeping communities informed of our activities is integral to BC Hydro's business. We encourage a two-way communication culture within the communities we serve to ensure that BC Hydro is regarded as a good corporate citizen. We recognize the importance of our interaction with community leaders both individually and collectively. As such, our ongoing support of local government initiatives carries through to the Union of British Columbia Municipalities conference and five other regional municipal conferences held throughout the province each year.

Before we embark on major capital investments in our aging infrastructure or perform system resiliency improvements, we involve those stakeholders and First Nations who may be affected in the decision-making process.

Emergency planning meetings with communities ensure that BC Hydro and local government are prepared prior to emergency situations. In fiscal 2009, we worked with local authorities prior to potential flood situations so that we knew the location of their critical infrastructure, such as pump houses, in the event we needed to turn off electricity for safety considerations.

## STAKEHOLDERS

Just as with the communities we serve, BC Hydro continued to engage with a variety of stakeholders in fiscal 2009. We built on several key initiatives including such regulatory topics as the Long Term Acquisitions Plan to ensure our business is sustainable for generations to come.

The Electricity Conservation and Efficiency Advisory Committee (ECE) was established in late 2006. This group of external stakeholders provides input and advice on BC Hydro's conservation and efficiency initiatives.

BC Hydro continued to engage principal stakeholders on rate design processes through the Rates Working Group initiative.

In fiscal 2009, stakeholders from all sectors, in addition to approximately 700 First Nations and Independent Power Producers, participated in 10 information sessions and workshops related to BC Hydro's Calls for Power.

## COMMUNITY INVESTMENT

BC Hydro's Community Investment and Outreach department supports, educates and strengthens communities by providing:

- donations and sponsorships to community-based organizations and registered charities,
- scholarships to students who are leaders and role models in their schools and communities, and
- a team of Outreach representatives to develop and deliver programs that encourage B.C. residents to change the way they conserve energy.

### Donations and Sponsorships

Community-based, non-profit organizations and registered charities may apply for donations and sponsorships through our online application system. To qualify for funding, projects must support BC Hydro's long-term energy conservation goals and fall into one of four funding areas: environment and sustainability, youth and education, people and leadership, and community initiatives.

We give preference to initiatives that support Power Smart programs, engage and support the Aboriginal Peoples of B.C., and allow for onsite customer education and interaction. Over the past fiscal year, we received more than 1,000 requests for donations or sponsorships, and funded over 550 community-based projects across every region of the province. In total, we invested \$1.2 million in donations and \$1.6 million in sponsorships. We awarded more than \$100,000 in scholarships and endowments to students who are leaders and role models in their schools and communities.

We also support the BC Hydro Employees' Community Services (HYDRECS) Fund, an employee-and-retiree managed fund, and the BC Hydro Power Pioneers Association, a group of over 5,000 BC Hydro retirees who donate their time to local and provincial charities and service clubs.

# PEOPLE

## CORPORATE/REGIONAL DONATIONS

	F2005	F2006	F2007	F2008	F2009
Amount Allocated	1,035	1,005	1,225	1,185	1,185
(Dollars, in thousands)					
Percentage Allocation					
Arts and Culture	5	3	0*	0*	0*
Education	14	10	17	15	11
Environment	4	5	6	9	9
United Way	17	14	6	6	1
Aboriginal	8	13	0*	0*	0*
Regional	24	26	39	42	42
Scholarships	13	15	10	7	8
Employees' Community Services Fund	10	10	10	8	9
Community Investment, People and Leadership	7	5	11	13**	20**

Corporate and Regional Donations are monetary grants, sponsorships or in-kind contributions provided by BC Hydro to registered charities or not-for-profit organizations to support cultural, social and economic well-being in communities around the province of British Columbia.

\*Arts and Culture, and Aboriginal were considered a separate category in the past, but since fiscal 2007 and going forward, these allocations have been integrated into the main funding areas.

\*\*For fiscal 2008 and fiscal 2009, the People and Leadership funding and Community Investment funding areas are reported together.

The drop in Education between fiscal 2008 and fiscal 2009 is due to moving one donation from Education to People and Leadership.

For fiscal 2009 donation initiatives were planned to have a stronger customer focus that included marketing and leveraging opportunities similar to sponsorships.

### Employees and Retirees Social Commitment

HYDRECS is an employee-and retiree-managed fund that supports Canadian charities in the health and social services sector. Employees and retirees made donations to approximately 600 charities through the fund. Total contributions made by employees and retirees for fiscal 2009 were \$0.9 million. Additional support for local charities is provided through the organization's Community Growth and Relationship Funds.

### Community Outreach

This year marks the tenth anniversary of BC Hydro's Community Outreach efforts, celebrating conservation and providing more than 1,000 career opportunities for representatives throughout the province to date. Community Outreach consists of teams in the Lower Mainland, Vancouver Island, the Interior and Northern B.C. promoting energy conservation with a "Join Team Power Smart" message at each event.

Last year, Outreach representatives attended more than 2,000 community and Power Smart events, more than 2,400 Product Incentive Program (PIP) walk-throughs, and connected with more than 505,000 customers.

Throughout the year, Community Outreach representatives activated 135 BC Hydro sponsorships, 238 Retail events, and attended 330 community events, educating over 290,000 people and earning more than 2,700 media hits through radio remotes, public service announcements and, print and television interviews and stories.



*An Outreach representative educates youth in the Okanagan. In the past 10 years, BC Hydro Representatives have attended more than 15,000 events throughout B.C. The program has also changed names—YES team, youth team, Power Smart Outreach, BC Hydro Outreach—but their purpose has always been the same: to be BC Hydro ambassadors in the communities we serve.*

## RELIABILITY (CUSTOMER)



### GUIDING PRINCIPLE:

To have the best in class reliability by customer segment.

*The team working on the Whistler venues takes a break at the Whistler Nordic Centre. From left to right: Deepak Ratnam, Will Gemmell, Tom Neary and Larry Cowell.*

Customer reliability means the delivery of an uninterrupted supply of electricity to BC Hydro customers. While customers currently report a high level of satisfaction with overall system reliability, as seen in the Customer Satisfaction information on page 33, BC Hydro's actual reliability results did not meet our annual targets. The leading causes for these results are attributed to transmission and substation outages, trees falling onto our power lines and distribution equipment failure. Aging assets, adverse weather due to the nature of where we live and the changing climate, combined with high impact incidents such as the downtown Vancouver cable fire in July 2008 are also key contributing factors to reliability.

Following the winter of fiscal 2007, which was one of the stormiest seasons in B.C. in recent years, BC Hydro has put in place a number of initiatives such as the system resiliency program, customer-based reliability initiative, distribution emergency response continuous improvement plan, and outage communication initiative. These initiatives are intended to strengthen the system to withstand foreign interference, improve reliability at the circuit level for specific customer segment, reduce outage restoration time, and provide timely, accurate outage information to customers. An assessment of overall improvement based on the last three years shows that in a number of communities such as Alert Bay, Campbell River and Lake Cowichan on Vancouver Island, and Powell River, Sunshine Coast and Vancouver in the Lower Mainland, reliability in terms of outage frequency and/or duration has improved in fiscal 2009 relative to the previous two years. As well, successes have included visits to over 40 communities most adversely affected by storm events in recent years to provide outage information, communicate critical distribution infrastructure information and gather community input. These meetings have been well received, with positive feedback provided directly at the meetings and indirectly through coverage in the local media, and in the customer satisfaction survey. The impacts of these infrastructure improvements will continue to be felt in the years to come.

### STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would:

- build awareness and understanding – within BC Hydro and in the community – of what our customers need and expect, and the importance of notifying our customers quickly about outages and safety risks, as well as when their power might be restored;
- develop the Storm Resiliency Program to strengthen those circuits that are most susceptible to storms;
- assess and invest in circuits with poor reliability, where either the frequency or duration of outages exceeds a reasonable minimum level of performance to reduce the number of customers experiencing multiple outages;
- use life-cycle analysis to assess the condition and capability of assets (such as wires, poles and cables) and identify opportunities to deliver more reliable service; and
- continue to deliver the Smart Metering Infrastructure Project.

# RELIABILITY (CUSTOMER)

## RELIABILITY AND STORMS

BC Hydro's vast service territory, predominantly overhead distribution system, as well as the province's terrain, weather and vegetation, significantly affects our ability to cost-effectively achieve higher overall levels of reliability.

In fiscal 2009, BC Hydro experienced more widespread outages caused by transmission and substation issues than in previous years. These outages impacted larger numbers of customers and our ability to restore service was hindered by the difficult terrain in which our crews had to work.

Inclement weather such as snowstorms and windstorms also pose significant challenges to BC Hydro's distribution system because they can adversely disrupt our ability to deliver electricity to our customers. However, compared to the last two years, fiscal 2009 has been a relatively mild year for storm activities. The exception was in December 2008 when a series of wind and snowstorms swept across the Lower Mainland and Vancouver Island, interrupting power supply to approximately 260,000 customers, resulting in 1.2 million lost customer hours.

### CAIDI (hours)

*lower is better*



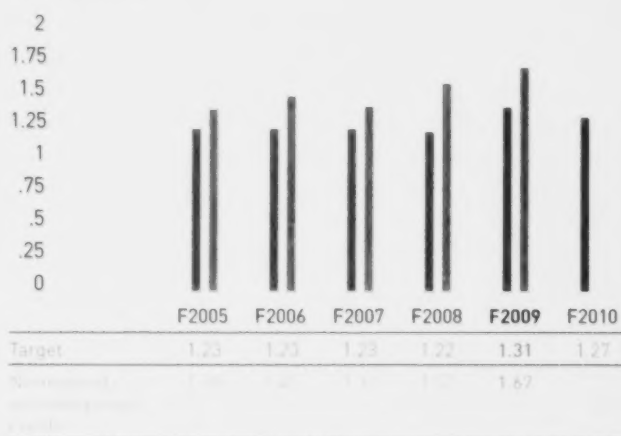
CAIDI is the average interruption in hours per interrupted customer.

BC Hydro's targets are set against normalized results which exclude major uncontrollable events as noted below. Normalized CAIDI is worse than Plan due to longer-than-planned outage restoration time. Adverse weather, trees falling onto power lines and distribution equipment failure are the major contributing factors for the unfavourable performance.

Major uncontrollable events (i.e. windstorms, earthquakes, forest fires) are not included if they cause an outage that results in more than 70,000 lost customer hours or more than one per cent of annual lost customer hours in the distribution system. While major uncontrollable events are not included in the numbers above, controllable causes are included. These include equipment failure or human error at the distribution, substation or transmission level, even if the resulting lost hours are in excess of one per cent of the annual customer hours.

### SAIFI (frequency)

*lower is better*



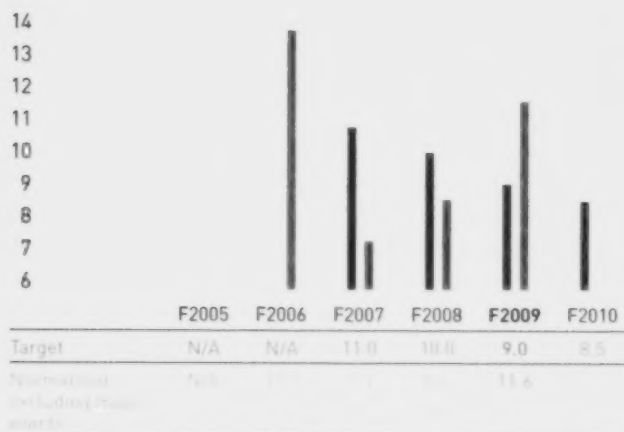
SAIFI is a measure of how many sustained interruptions an average customer will experience over the course of a year.

Normalized SAIFI is worse than Plan as normalized customer interruptions are more than 20 per cent higher than Plan. Higher-than-expected outage frequency due to transmission and substation outages, adverse weather and trees growing or falling onto power lines are the leading causes of the unfavourable SAIFI performance.

# RELIABILITY (CUSTOMER)

## CEMI-4 (percentage)

lower is better



CEMI-4 is the percentage of customers experiencing four or more outages during a given time period.

CEMI-4 is a customer-focused reliability measure implemented in fiscal 2007 to provide customers with an intuitive understanding of BC Hydro's reliability performance. Fiscal 2009 year-end CEMI-4 is worse than Plan due to increased outage frequency primarily caused by transmission and substation outages, adverse weather and trees. At year-end CEMI-4 was 11.6 per cent, meaning that 208,200 customers have had four or more outages in a year.

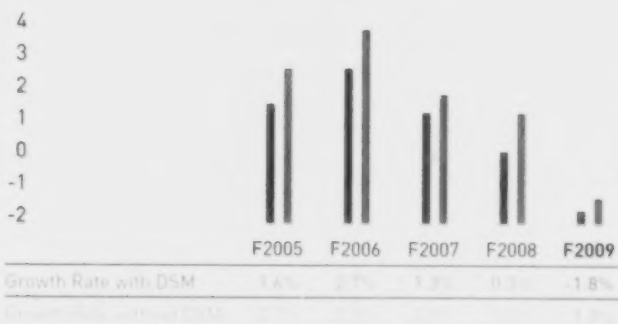
BC Hydro participates in an annual Transmission and Distribution Benchmarking Study conducted by First Quartile Consulting. In fiscal 2009, BC Hydro's reliability performance (CAIDI and SAIFI including major events) ranked in the third quartile relative to leading Canadian and U.S. utilities participating in the study.

## CUSTOMER GROWTH

Even with the economic downturn in the second half of fiscal 2009, BC Hydro experienced steady customer growth. Approximately 34,000 new accounts were added in fiscal 2009, compared to about 30,000 a year earlier.

In early fiscal 2009, the North and South Interior saw significant growth. Municipal work continues to drive growth in the South Interior. On Vancouver Island, growth was primarily driven by retirement and resort communities and vacation homes. In Vancouver, despite reduced housing starts, growth continued but developers and investors did place a number of construction projects on hold, which will be reflected in the results for fiscal 2010. Lastly, major infrastructure projects such as the 2010 Olympic and Paralympic Winter Games, Canada Line and major highway improvements continued to contribute to growth in the Lower Mainland.

## DEMAND GROWTH (With and Without Demand-Side Management) Percentage



The growth rate is calculated as the year-over-year change in domestic load. However, despite higher customer numbers, overall load decreased due to the economic impact on BC Hydro's industrial customers. Slower growth in the residential and commercial sector, and the negative growth rate in the industrial sector, added up to a decline in total BC Hydro firm sales in fiscal 2009 relative to fiscal 2008.

Results for Demand Growth without DSM, published in prior year reports, may differ due to changes in BC Hydro's historical annual acquired energy savings.

## SYSTEM RELIABILITY IMPROVEMENTS

In order to improve upon our reliability, BC Hydro implemented the System Resiliency Program. Currently in its second year of implementation, system resiliency is a five-year capital investment program in response to the extreme storm season in fiscal 2007 which resulted in an unprecedented level of power interruptions to our customers. Its purpose is to increase the ability of the distribution system to withstand or avoid events like



## RELIABILITY (CUSTOMER)

adverse weather and trees falling onto the power lines. It should also help to minimize the impact of interruptions by building flexibility into the system to re-route power and reduce outage restoration times.

Overall design and construction work on capital projects scheduled for completion in fiscal 2009 is 95 per cent complete at year-end with expenditures of \$23.2 million. Projects spanned communities across North and South Vancouver Island, Lower Mainland, Fraser Valley, Okanagan, Thompson/Shuswap, Prince George, Dawson Creek, Williams Lake, and Fort Nelson.

In the vegetation management area, 100 per cent of the annual vegetation work plan on 83 targeted circuits has been completed as of March 31, 2009 with actual expenditures of \$4.2 million. Key communities where vegetation management work was completed include: White Rock/Tsawwassen, Mission, Whonnock, and Richmond to Chilliwack, as well as others in the Whistler area and on Vancouver Island.

## GRID MODERNIZATION

Over the past year, there has been an increasing acknowledgement of the need to modernize power delivery systems worldwide. BC Hydro is also considering a variety of technological options and system advancements to increase our system's reliability, encourage energy conservation and improve our safety performance. One of the components of grid modernization is smart metering and the infrastructure attached to it.

Grid modernization will incorporate advanced automation in control and monitoring equipment, information technology and communications to improve grid performance and support an array of services for customers, such as faster outage restoration. In fiscal 2009, BC Hydro developed a Smart Grid framework to support a common understanding of the Smart Grid among utilities, and we are using it to guide our vision of the modern grid.

The Smart Metering & Infrastructure (SMI) Program will provide the foundation to automate, modernize and upgrade our electricity grid. It will support fundamental changes to electricity delivery and usage, making the right information and tools available to help customers manage their own electricity consumption and make more energy efficient choices. The SMI Program provides direct benefits to BC Hydro customers in the near term and lays the infrastructure to support future distribution system applications and technologies, including distributed generation and preparing for plug-in vehicles.



*A Certified Utility Arborist preparing a grand fir for removal under the System Resiliency Hazard Tree Program. Photo credit: Jeff Labelle, Vegetation Planning Manager*

In fiscal 2009, a process was undertaken to explore the technologies and suppliers in the marketplace and gather market intelligence about other smart metering projects in North America and Europe. From this work, the Smart Metering & Infrastructure Program was further refined into four integrated projects. In aggregate, the projects have a positive net present value and will be submitted to the BCUC for review and approval. The four integrated projects are:

1. The Smart Metering Project (*estimate \$480-530 million*) is the installation of approximately 1.8 million digital meters with two-way communications capability to BC Hydro customers.
2. The In-Home Display Project (*estimate \$70-100 million*) will make in-home displays available to customers. These displays provide information on electricity use that can help with in-home conservation.
3. The Theft Detection & Deterrence Project (*estimate \$100-170 million*) is the installation of specialized metering devices to accurately measure electricity delivered to identify and eliminate theft and minimize the subsequent impact on ratepayers.
4. Grid Modernization and Infrastructure Upgrades (*estimate \$80-130 million*) are a series of initiatives that improve the efficiency of our system and build the foundation for the Smart Grid of the future.

# RELIABILITY (CUSTOMER)

## REMOTE COMMUNITY ELECTRIFICATION

In fiscal 2009, BC Hydro's Remote Community Electrification program, which provides remote B.C. communities with the opportunity to receive reliable and sustainable electrical services, moved forward with several initiatives. We continue to work with a number of First Nations communities to build lasting relationships and determine collaborative energy solutions that work for their communities. Wuikinuxv is one example where BC Hydro provided operations support, ensuring the community had a second winter without a serious power failure. The program also provided operations support to Port Douglas and Tipella where the two communities combined experienced only two hours of total outages in the last year.

BC Hydro also began implementing the "Power Smart for Remote Communities" and "Emerging Alternative Energy" programs. These two programs continue to help BC Hydro pursue alternatives to reduce the amount of diesel used in remote communities, a policy action in the BC Energy Plan. This year, working with the Ministry of Energy, Mines and Petroleum Resources (MEMPR), we have taken energy saving kits to the communities of Uchucklesaht, Hesquiaht, Samahquam, Skatin, Port Douglas and Tipella.

## BC HYDRO'S INVOLVEMENT IN THE VANCOUVER 2010 OLYMPIC AND PARALYMPIC GAMES

As an official supporter of the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro will provide clean power for the events, and leave behind an infrastructure legacy that will benefit British Columbians. This includes building the electrical infrastructure and providing operational support for the venues. We are also leveraging our official supporter status to benefit employee engagement and energy conservation.

The electrical infrastructure and operational support planning for 17 mountain and city venues are on schedule with nine of the venues connected and the remainder targeted to be completed by summer 2009. In addition, both internal and external sponsorship activation activities, the Outreach "Power the Games: Save Like a Champion" Tour and Team Power Smart incentive programs, are underway.

BC Hydro is also lucky to have a Winter Paralympian as an employee. Lauren Woolstencroft is an engineer working on the Olympic venues. She is also a member of Team Power Smart and is helping us to spread the conservation message.

## BENCHMARKING AND CUSTOMER RELIABILITY

BC Hydro participates annually in several benchmarking studies with leading Canadian and U.S. utilities to compare our performance relative to other utilities, to analyze drivers of superior performance and to identify best practices and opportunities for continuous improvement. The studies have shown that notwithstanding our service territory being significantly larger than other utilities surveyed, we are one of the lowest cost service providers and have many of the industry's best practices in place.

In particular, our distribution wires business has been consistently ranked among the best in terms of distribution expenditures per customer, a relevant benchmark for distribution efficiency. However, our reliability performance does not compare favourably with the panel of North American utilities due to our vast and largely rural service territory, predominantly overhead system, and vegetation challenges.

*The Power the Games: Save like a Champion Tour will be travelling across the province attending community events in fiscal 2010.*

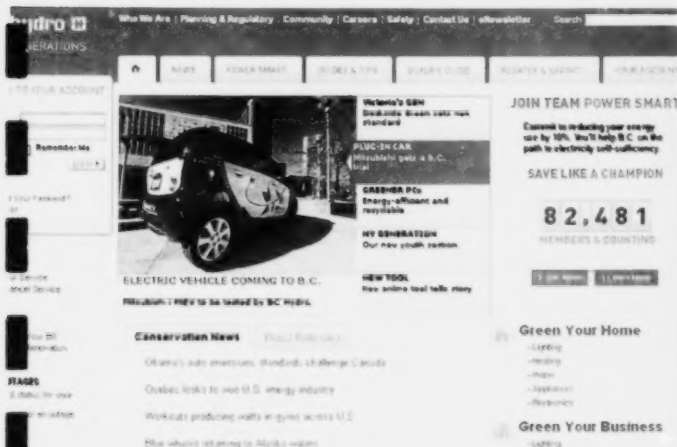
*The Conservation Lab, seen here, will be at many of these events. Planning for the tour, the largest ever for BC Hydro's Community Outreach teams, occurred in fiscal 2009.*



BC Hydro has three times as many trees per overhead pole mile as the North American average. Since approximately 85 per cent of our distribution system is overhead (more than almost all the utilities surveyed), the system is much more susceptible to major weather events and the attendant tree-related problems.

In summary, considering the challenges inherent in our operating environment, BC Hydro is able to provide an acceptable level of reliable service to the customers while maintaining its position as a low cost service provider.

# CUSTOMER SATISFACTION



## GUIDING PRINCIPLE:

To lead by offering extraordinary value and service.

*With a vision to be the energy conservation resource for British Columbians, BC Hydro transformed bchydro.com just in time for Power Smart Month in 2008. The site provides a better customer experience including a stronger focus on energy conservation content, a fresh new look, and improved access to information and tools designed to foster and enable energy conservation behaviour. Over 75 employees worked on the new site in a project led by our Digital Communications group.*

Reliable power and customer service continue to be noted as key strengths for customer satisfaction with BC Hydro. Throughout fiscal 2009, BC Hydro continued to build upon our understanding of our customers' wants, needs and expectations to best support key corporate initiatives as well as to meet our Customer Satisfaction and Energy Conservation goals. Workshops and training sessions were delivered on conservation, rates, bill management and outage processes to a variety of customer groups and community stakeholders including the low income segment and small and medium business groups. BC Hydro launched the newly designed external website in September 2008 and BC Hydro's call centre had over 37,000 conservation-focused customer interactions relating to all aspects of energy efficiency and conservation.

## STRATEGIES IN THE 2008/09 TO 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on:

- improving service in high customer contact areas by improving outage communication, contact centre interactions, BC Hydro website content and functionality, customer issues resolution and claims processes and customer understanding of electricity and the services BC Hydro provides;
- building our understanding of customers through research, sophisticated segmentation and feedback mechanisms, best practice reviews and benchmarking;
- promoting Power Smart programs to assist customers in reducing their energy costs;
- ensuring employees understand the customer experience and how their actions create optimal customer value and satisfaction;
- developing a Customer Experience Framework; and
- closely managing change with our customers through clear, targeted communications, well-planned implementation, and excellence in our customer service operations.

In fiscal 2010, outage communications will transition from initiative-based programs to become embedded into day-to-day service delivery and link to our continued commitment and focus on communication and customer engagement.

# CUSTOMER SATISFACTION

## CUSTOMER SATISFACTION RESULTS

BC Hydro achieved a 90 per cent overall customer satisfaction rating in fiscal 2009, exceeding our target of 80 per cent. Satisfaction was highest among key accounts at 92 per cent, followed by small/medium business at 89 per cent and residential at 88 per cent. Strong customer satisfaction results are attributable to a number of factors, including increased focus on communication and customer engagement with respect to conservation, outage management, and improvements in call centre service.

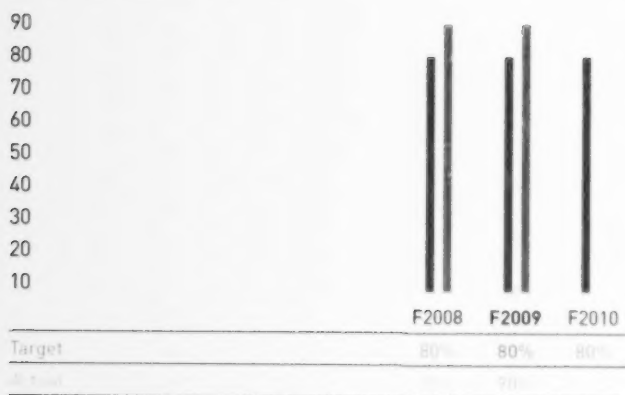
Customer satisfaction ratings are based on the percentage of customers who indicate they are "very satisfied" or "satisfied" with BC Hydro on a four-point scale across an equally weighted index of five key drivers:

- providing reliable electricity;
- providing value for money;
- demonstrating a commitment to customer service;
- acting in the best interest of British Columbians; and
- demonstrating efforts to communicate with customers and communities.

"I would really like to thank the hard-working outdoor and indoor people who worked to restore the power in the last few days. We were out three times in one day and waited only up to two hours to get going again. Thanks everybody for being stalwart and professional." —  
www.bchydro.com – Voice of our Customers May 2009

### CUSTOMER SATISFACTION

percentage – higher is better



Customer satisfaction ratings are based on a percentage of customers who indicate they are "very satisfied" or "satisfied" with BC Hydro on a four-point scale across an equally weighted index of five key drivers. Customers are divided into three segments: residential, small/medium business and key accounts. All three segments are equally weighted and reported as a four-quarter rolling average using a continuous surveying methodology.

### BILLING ACCURACY

higher is better

	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	98.2%	98.2%	98.2%
Actual	98.2%	98.2%	98.2%	98.5%	98.5%

Billing Accuracy is the percentage of invoices that are accurately calculated based on the customer's consumption and do not require adjustment or rebilling. Billing Accuracy remains stable and above target for fiscal 2009.

### FIRST CALL RESOLUTION

higher is better

	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	N/A	66%	66%
Actual	70%	67%	67%	68%	68%

First Call Resolution is the percentage of customer calls that are resolved during the first contact with a call centre agent, without the need for additional investigation or follow-up. First Call Resolution continues to remain stable and above target.

## CUSTOMER SATISFACTION

### OUTAGE COMMUNICATION

Informing customers about outage preparedness is crucial to responsible utility practice and, in the past year, we have promoted storm outage preparedness using various communication channels including televised public service announcements, print advertisements in community newspapers, bill inserts, and through our Outreach teams at community events. In addition, our field employees, once on site and after assessing the situation, have continued to make reviewing the reasonability of and updating the Estimated Time of Restoration (ETR) a priority, and thereby have improved the accuracy of our ETR times significantly. Another component of outage communications involves our stakeholders. In fiscal 2009, a secure web interface was created to allow for two-way electronic communications with the Emergency Services community around high priority incidents involving our equipment. In fiscal 2010, outage communications will transition from initiative based programs to become embedded into day-to-day service delivery and link to our continued commitment and focus on communication and customer engagement.



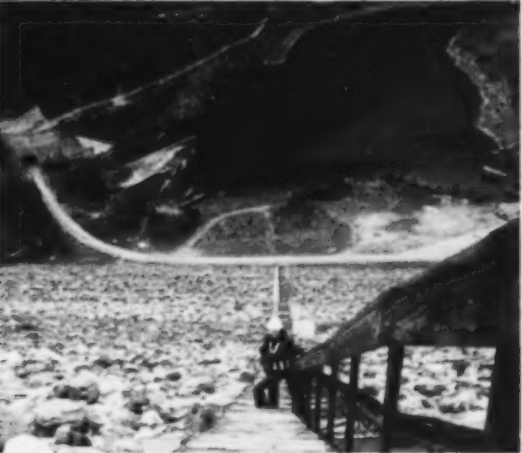
*Ever since veteran Abbotsford lineman Walter Shwydsky began arriving at outage scenes, he's been going through an outage checklist in his mind: assessing the cause of the outage, the safety of the scene and the staffing required to restore power. But in the last two years, he's added another major item to the list: calling in to update the estimated time of restoration (ETR). He knows that this small action will allow customers to make important decisions, from letting the children out of school for the day to getting a hotel for the night. As a result of efforts like Walter's, BC Hydro's ETR's have improved significantly in this past fiscal year.*



## RELIABILITY (SUPPLY)

### GUIDING PRINCIPLE:

We will provide electricity self-sufficiency (energy and capacity) in B.C. to meet all domestic needs.



Shawna McMillan, Engineer in Training, standing on the Mica Dam in May 2008. Photo credit: Glenn Erho, Engineering Technologist Project Specialist.

Reliability of supply is achieved by ensuring system operations are managed appropriately, maximizing unit availability and minimizing the number of outages during the winter peak period, reinvesting in generating assets, and incrementally supplying through power acquisitions and Resource Smart projects. These steps are having an impact and we are closing the gap between supply and demand in British Columbia.

Ensuring that we have the supply to meet load is a core focus for BC Hydro. When Revelstoke Unit 5 is completed, BC Hydro will have adequate capacity to meet threshold reliability requirements over the winter peak period. Until then, we will meet capacity by relying on contingency resources such as contracted Load Curtailment with large customers and imports to meet peak loads. In fiscal 2009, BC Hydro's net consolidated electricity purchases for domestic use were 4,602 GWh. Throughout the year, the reliability of generation also impacts the cost of energy to meet domestic load as well as the income that can be earned from trade.

### STRATEGIES IN THE 2008/09 TO 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would:

- ensure generation Heritage Assets maintain reliability targets;
- manage our peak load supply reliability by minimizing the amount of unit outages during the winter peak period;
- secure firm market energy (electricity and gas) for domestic peaks;
- expand our load curtailment programs with customers as contingencies for winter capacity supply;
- return the sixth unit at the Burrard Thermal Generating Station to service in 2008; and
- advance various power acquisition processes and initiatives to ensure incremental supply is in place to meet future needs.

# RELIABILITY (SUPPLY)

## SYSTEM OPERATIONS

To ensure a reliable supply of energy and capacity, BC Hydro closely monitors factors such as weather and snowpack forecasts, reservoir levels, customer loads, market conditions and the availability of Heritage and Independent Power Producers (IPPs) generating units to supply power. These studies form the basis of decisions to prioritize operation of specific generating plants, identify necessary contingency resources and set threshold prices for the purchase or sale of energy.

### Water Supply and Reservoir Storage

Generation from BC Hydro's predominantly hydroelectric system is dependent upon precipitation and reservoir storage. Water inflows into our reservoirs were 96 per cent of average for fiscal 2009.

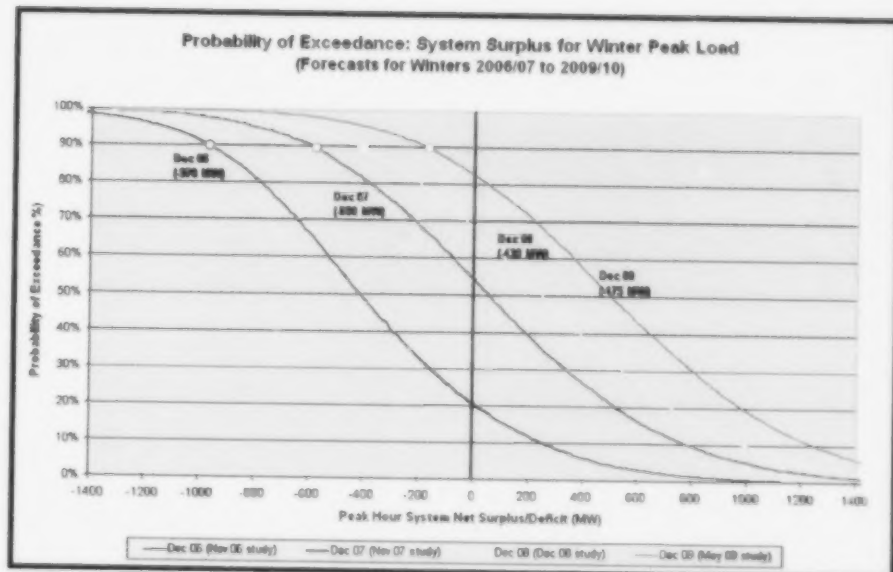
During April 2008, cold temperatures experienced across British Columbia and the Pacific Northwest resulted in a delay in the start of the freshet, or spring runoff. The storage flexibility in our largest reservoirs and energy imports supported system energy requirements during this time. By mid-May the freshet began and low market prices for energy allowed BC Hydro to refill reservoirs at competitive prices.

During the third and fourth quarter, Columbia River Treaty constraints restricted discharge of water at Mica and BC Hydro purchased about 3,000 GWh of energy to meet domestic load requirements.

At the end of fiscal 2009, total reservoir storage was about 1,900 GWh above average and 1,200 GWh (795 GWh after adjustment for non-treaty storage) above the previous year's storage level.

### Forecast Supply Demand Excess for Peak Load

BC Hydro plans to be able to meet the peak load using firm resources with a 90 per cent probability of exceedance. In other words, we should have enough firm resources to meet the peak load nine years out of 10. In other years we will rely on non-firm sources to meet capacity constraints. Peak loads typically occur between November 15 and February 15. As the chart below indicates, in the past we would need to rely on sources such as market purchases in the winter months to supply domestic needs, and were short approximately 400-1000 MW of capacity to meet the forecast peak load.



BC Hydro has reduced its electricity supply risk during the period when customer demand is at its peak. In the past, typically we would need to rely on market purchases and other contingency resources in the winter months to ensure adequate capacity was available to meet forecast peak domestic loads. The chart provides a distribution of probable peak loads for the last three years and for next winter. In previous years, BC Hydro had a forecast capacity deficit of approximately 400 to 1000 MW at the 90th percentile confidence level.

This past winter (2008/09) passed without any major system capacity constraints. The peak load for this past winter (10,811 MW) occurred on Dec 19, 2008. Despite colder than design temperatures, the system load was well below the forecast expected value (10,370 MW) due to the economic downturn. Under these conditions, and running half of Burrard, the system showed a net surplus of approx 260 MW on the peak load hour. Had the actual load been as high as or higher than the design value, the system would have required additional Burrard units or the use of contingency resources.

## RELIABILITY (SUPPLY)

### Customer Load Curtailment Program

To acquire additional short-term capacity, and provide more options and operating flexibility for meeting customer peak loads, BC Hydro introduced a Customer Load Curtailment Program in 2007. Fiscal 2009 marked the second year of an expanded Load Curtailment Program with our large customers. BC Hydro successfully conducted a load curtailment event on December 15, 2008 during a period of abnormally cold temperatures and consequent high customer demand.

## GENERATION AVAILABILITY AND RELIABILITY

In addition to the amount of water in our reservoirs, the availability of our generating facilities contributes to our ability to meet customer demand. Availability reflects the percentage of time a generating unit is in commercial service and available to produce energy. Unit Reliability refers to the frequency that generating equipment encounter unplanned outages.

### Winter Generation Availability

The Winter Generation Availability Factor (WGAF) tracks generation availability between the period of November 15 to February 15, when customer demand is most likely to reach its annual peak. Fiscal 2009 WGAF was better than target at 96.4 per cent. This measure was at significant risk due to outages at Kootenay Canal to accommodate BCTC capital work, the GM Shrum Unit 3 outage, and several short duration outages to improve equipment reliability. Several plants achieved 100 per cent availability over the winter period including Peace Canyon, Seven Mile, Bridge River 2, Cheakamus, Clowhom, Stave Falls, Jordan River, Puntledge and La Joie generating stations.

In November 2008, BC Hydro returned the 6th unit at Burrard Thermal Generating Station to service for the first time since 2003. The Burrard facility is a cost-effective source of generating capacity, located close to our largest load centre, and provides additional voltage regulation benefits.

### Generation Reliability

Seven key hydro facilities account for approximately 80 per cent of BC Hydro's generation capacity, and BC Hydro also measures performance through the number of forced outages experienced by each generating unit. In fiscal 2009, key facilities experienced 1.9 outages per generating unit, out-performing the target of 2.2.

A major failure of the GM Shrum Unit 3 turbine in March 2008 resulted in the unit being forced out of service throughout fiscal 2009. Repairs to the turbine and associated components were undertaken on an urgent basis, and the unit was returned to service in May 2009 following an innovative repair solution.

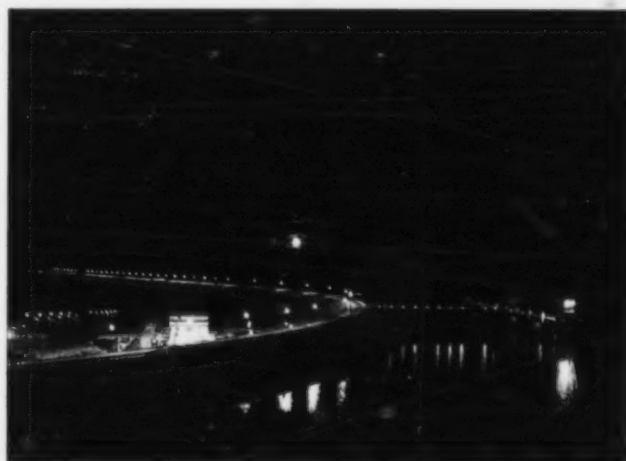


Photo credit: Coleman Mercereau, CPC Technologist Foreman, Northern Operations: GM Shrum Generating Station.

### WINTER GENERATION AVAILABILITY

percentage - higher is better

	F2005	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	95.8	96.2	96.2	96.3
Actual				96.2	96.4	

This performance measure gauges the reliability of our hydro generation fleet over the critical winter peak period when demand is greatest due to cold weather. Units become unavailable during this time primarily due to unexpected forced outages as well as scheduled outages required to maintain them. This measure drives the need for us to complete all major maintenance in the non-critical period and to minimize outages during the critical peak periods.

# RELIABILITY (SUPPLY)

## CAPITAL INVESTMENT IN GENERATING ASSETS

BC Hydro is reinvesting in its Heritage generating facilities to improve reliability of supply and provide incremental increases to BC Hydro's energy and capacity supply. BC Hydro's capital expenditure on generation assets has been increasing steadily since fiscal 2001. Capital investment including both Sustaining and Growth capital has grown from \$90 million in fiscal 2001 to \$365 million in fiscal 2009. This will continue over the next five years – and likely beyond – as a number of major projects move into the expenditure-intensive implementation phase. For a list of our current capital projects, see page 123 of the Appendices.

### Sustaining Capital

BC Hydro's largest dams and power-generating facilities were constructed in the late 1960s, 1970s and early 1980's, and many smaller facilities have been in operation for even longer. While BC Hydro has maintained these facilities through focused and effective maintenance programs, many assets require major upgrades, refurbishment or replacement to continue to provide British Columbia with reliable electricity.

BC Hydro has developed a Strategic Asset Management Plan, including facility Asset Plans that detail the overall investment strategy for each facility, taking into account the facility role, issues, performance targets, risks and growth opportunities. As a result, in the past few years, BC Hydro has seen an improvement in the health of our assets. BC Hydro employs a life-cycle approach to asset management, designed to maximize the economic return on physical assets over their life, while at the same time managing the risks inherent in owning, managing and operating a large and aging fleet of generation assets.

### Resource Smart and Growth Projects

The Resource Smart Program provides additional electricity to the BC Hydro system by upgrading, with generally low or no incremental environmental impact, existing generating facilities. Since its inception in the late 1980s, this program has added almost 1,300 GWh of annual production. In fiscal 2009, the first of three generating units at the redeveloped Aberfeldie Generating Station was placed in service. The new 24 MW facility replaced the 5 MW plant built in 1922. The final two units were placed in service in May 2009. Other active Resource Smart projects include the installation of a fifth generating unit at Revelstoke and the upgrade of the Fort Nelson Generating Station.



*Graham Ferriock, Engineering Division Manager and the 2008 winner of The BC Hydro Award of Distinction in Safety, in memory of Don McEwen. "Graham integrates safety into everything he does on the Revelstoke Unit 5 project. His passion for safety inspires and encourages everyone around him to ensure that safety is the highest priority," said Ken McKenzie, BC Hydro project manager, Revelstoke Unit 5, on nominating Graham.*

Site C is a potential third dam and hydroelectric generating station on the Peace River, and is one of several potential resource options being considered to help meet British Columbia's future electricity needs. The BC Energy Plan called for BC Hydro and the Province to consult with First Nations, communities, and the Province of Alberta on the potential project.

BC Hydro is taking a stage-by-stage approach to the evaluation of Site C. Work during Stage 2, Project Definition and Consultation, involved extensive consultation, as well as project engineering, environmental studies and other technical reviews. If built, Site C would provide a clean and renewable source of electricity for more than 100 years. Site C would also have impacts relating to land, roads and bridges, fish, wildlife and community services.

From December 2007 to December 2008, BC Hydro conducted three rounds of public and stakeholder consultation, starting with pre-consultation to determine how people want to be consulted and on what topics. Two rounds of public consultation followed covering a range of environmental and engineering design topics. First Nations consultation is also underway directly with aboriginal groups that may be impacted. In addition, a specific consultation and program was established for property owners in the region. Discussions with the Province of Alberta and Northwest Territories have been led by the Province.

BC Hydro will make a recommendation for government decision in fall 2009 on whether to proceed to Stage 3 of the potential project, which would involve regulatory reviews. BC Hydro will also issue a public report highlighting key findings during Stage 2.

# RELIABILITY (SUPPLY)

## INDEPENDENT POWER PRODUCERS

BC Hydro's long-term strategy includes buying energy. This electricity procurement plays a critical role in reaching the BC Energy Plan's objective of achieving electricity self sufficiency by 2016, as well as meeting the B.C. Government's policy actions for maintaining competitive rates, clean or renewable electricity and the development of a vibrant and competitive IPP sector.

During fiscal 2009, BC Hydro made considerable progress in advancing three competitive call processes for Independent Power Producers – the Standing Offer Program, Bioenergy Call and Clean Power Call.

### Standing Offer Program

The Standing Offer Program was launched in April 2008 following the receipt of regulatory approval. This program offers a fixed energy price and streamlined acquisition process for clean, renewable or high-efficiency cogeneration electricity projects with a capacity greater than 50 kW and up to 10 MW. To date, BC Hydro has received 12 applications under the Standing Offer Program for a total of approximately 220 GWh per year of energy. In February 2009, BC Hydro filed its first executed Electricity Purchase Agreement (EPA) with the BCUC for regulatory acceptance.

### Bioenergy Call

The Bioenergy Call is a two-phase call for power to use wood infected by the mountain pine beetle as well as other biomass sources. For the Phase I Request for Proposals (RFP), BC Hydro received proposals for 20 projects from 13 proponents in June 2008. Four EPAs were awarded in November 2008 for 579 GWh/year of firm energy. The awarded contracts had been filed with the BCUC for regulatory acceptance pursuant to section 71 of the *Utilities Commission Act*.

In March 2009, BC Hydro announced the launch of the second phase of the Bioenergy Call. Phase II is being conducted as a two-stream process with the first stream targeting larger-scale biomass projects and the second phase focusing on smaller-scale innovative, community-level energy supply solutions using biomass. BC Hydro expects to receive proposals under both Phase II streams during the fall of 2009 with final project selection targeted to occur in early 2010.

### Clean Power Call

The final terms for the Clean Power Call RFP were issued in June 2008. Under the RFP, BC Hydro is targeting to purchase approximately 3,000 GWh per year of clean or renewable energy from larger projects using proven technologies, such as hydro, wind, solar and geothermal energy. In late November 2008, 68 proposals were received from 43 proponents representing over 17,000 GWh/year of firm energy. BC Hydro plans make its Clean Power Call EPA awards in mid-2009 once it receives the BCUC's decision regarding the 2008 Long Term Acquisition Plan (LTAP).



# CLIMATE CHANGE, ENERGY CONSERVATION AND EFFICIENCY



## GUIDING PRINCIPLE:

We will develop and foster an energy conservation and efficiency culture in B.C. that utilizes technology to lead customers to choose a dramatic and permanent reduction in the use of electricity.

*A BC Hydro Hydrogen internal combustion engine truck and hydrogen fuel cell car outside the hydrogen fuelling station at Powertech Labs in Surrey. For more information on our fleet, see the Fleet Vehicle Emissions section.*

## STRATEGIES IN THE 2008/09 – 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on implementing a new 20-year Demand-Side Management (DSM) plan that includes:

- developing and implementing new electricity rate structures;
- supporting the development and adoption of new building codes and standards;
- deploying smart metering to all customers by 2012;
- implementing community strategies such as the Community Challenge, Turn it Off Tour and Power Smart Champions programs;
- developing key partnerships and engaging stakeholders to begin to shift public behaviour;
- stimulating innovation through the advancement of new energy efficiency technologies and practices;
- building the capability of the marketplace to respond to increased demand for energy efficient products and services; and
- increasing the existing portfolio of successful Power Smart programs.

In addition, we will address greenhouse gas emissions by:

- developing an emissions inventory verification and reporting system to meet mandatory reporting requirements and internationally accepted protocols;
- identifying, quantifying, implementing and tracking greenhouse gas (GHG) reduction opportunities to meet Service Plan targets;
- meeting regulatory requirements and pursuing offsets as required; and
- participating in forthcoming regulatory mechanisms resulting from the Province's involvement in the Western Climate Initiative.

*For fiscal 2010, this priority has been separated into Energy Conservation and Efficiency, and Climate Change and Environmental Impact.*

# ENERGY CONSERVATION AND EFFICIENCY

As part of the Long Term Acquisition Plan (LTAP), BC Hydro filed a 20-year demand-side management (DSM) plan with the BCUC in June 2008. This addresses the second of the two critical energy planning targets laid out in the BC Energy Plan: to meet at least 50 per cent of our incremental resource needs through DSM by the year 2020. The LTAP anticipates demand-side management closing approximately three-quarters of the gap between forecast consumption and currently available supply. BC Hydro's demand-side management plan is consistent with recent changes to the *Utilities Commission Act* which establishes the requirement to acquire cost-effective demand side management as a preferred resource.

BC Hydro's traditional approach to DSM has succeeded in driving technological change for energy efficiency. However, to accomplish our vision of developing and fostering a conservation culture in B.C., in fiscal 2009, we have been engaging British Columbians so that efficiency and conservation are a way of life and a way of doing business.

## THE POWER SMART PLAN

The demand-side management plan has a three-pronged approach to energy conservation, anticipating roughly half of the electricity savings coming from Power Smart programs, 30 per cent from government codes and standards and 20 per cent from conservation rate structures. An integral part of the demand-side management plan involves increasing public awareness, providing education and information on energy efficient technologies and conservation actions, engaging communities and municipal leaders to include energy efficiency in their plans and promoting innovative technologies to reduce our electricity consumption.



*The Conservation Action Team at BC Hydro's Lower Mainland South location in Surrey. Teams such as this one provide grassroots programs and encouragement to employees regarding energy conservation at home and at work. In the photo are Heather Leake, Laura Pearce, Tara Schellenberg, Linda McBride, Deena Staveley, Jerome Dickey, Mike McClure and Bernhardt Spalteholz. Missing is Brian Baker.*

## DEMAND-SIDE MANAGEMENT (DSM)

GWh/Year

	F2008	F2009	F2010
Cumulative GWh/Year since F2008			
Target	296	761	9,700
Actual		983	

DSM reflects the cumulative rate of annual electricity savings resulting from DSM activities such as energy conservation and efficiency, and load displacement. Since the inception of the program in fiscal 2002 through fiscal 2007, the program has saved a cumulative total of 2,500 GWh/year, a new start year was commenced in fiscal 2008 to align with targets outlined in the BC Energy Plan. The annual cumulative targets align with the BC Energy Plan's 50 per cent energy conservation and efficiency target, and have been updated to reflect the 2008 Long Term Acquisition Plan targets. This target, in turn, corresponds to a target of 10,000 GWh savings by 2020, which includes additional savings that will be derived from changes to building code standards.

The reported cumulative energy savings for fiscal 2009 includes the energy earned under the 20-year 10,000 GWh/year plan (Power Smart III), starting with fiscal 2008 energy savings. Cumulative March fiscal 2009 energy savings are exceeding target as all three sectors (Industrial, Commercial and Residential) are tracking above targeted levels.

Targets are developed as part of long-term DSM planning which uses the results from a Conservation Potential Review and research related to other DSM tools as benchmarks for achievable savings.

# ENERGY CONSERVATION AND EFFICIENCY

## CONSERVATION CULTURE

BC Hydro encourages B.C. residents to show their personal leadership by joining Team Power Smart and setting an energy reduction target online through [www.bchydro.com](http://www.bchydro.com) or signing up for a free online conservation newsletter. Currently, Team Power Smart has over 70,000 members compared to a plan of approximately 40,000 members. As part of our involvement with the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro has issued a challenge to British Columbians for 210,000 people to sign up for Team Power Smart by the time the 2010 Winter Games begin next February.

## POWER SMART LEADERSHIP

When BC Hydro established Team Power Smart in 2007, we enlisted a number of high profile business, political, community and sports leaders who have roots in B.C. and share a passion for energy efficiency and conservation to join the team. These leaders continue to be committed to making changes in their own lives that lead to energy conservation and efficiency, with the goal of encouraging British Columbians to participate in conservation activities.

This past year, our Lead by Example program continued to develop BC Hydro's own conservation initiatives for employees and our facilities. From behaviour programs to capital projects to policy direction, we continue to promote energy efficiency and conservation with programs designed to instil a conservation culture both at home and at work. In addition to other facility upgrades, lighting and heating (HVAC) projects were undertaken at several of our generating stations, including Mica and Seven Mile. We have also developed updated energy efficiency and workplace environment standards for any new buildings and refurbishments.

## POWER SMART RESIDENTIAL PROGRAMS

BC Hydro continued to offer a range of initiatives targeted to residential customers.

In fiscal 2009, BC Hydro reinvigorated promotions for the Fridge Buy Back program and saw the largest increase in fridge pickups since fiscal 2005. In excess of 38,000 inefficient second fridges were picked up in fiscal 2009.

BC Hydro also launched a Low Income program in April 2008, beginning with distributing Energy Saving Kits to low income households. With the Low Income Advisory Group of external stakeholders, this program addresses barriers that prevent low income households from participating in demand-side management programs. The kits include energy efficient light bulbs, low flow shower heads and other products to help families save money on their energy costs. Over 9,300 kits were distributed to customers. The next phase of the program will launch in spring 2009 and will include an energy audit and installation of an array of free energy efficient technologies.

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"It was nice to get something free for a change. I am a widow on seniors' pension and I have to pinch every penny to keep my house." (Revelstoke, BC Source: Energy Savings Kit customer comments: Voice of our Customers May 2009)

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Finally, last year, BC Hydro incorporated the Renovation Rebate program into the Provincial government's Live Smart program. Visit [www.livesmartbc.ca](http://www.livesmartbc.ca) for more information.

## POWER SMART BUSINESS PROGRAMS

For industrial, large commercial, government and institutional customers, BC Hydro continues to offer the Power Smart Partner Program. Key components of the Program are energy management assessments, development of strategic energy management plans, energy manager funding and support, energy study funding, project implementation incentives, technology demonstration project funding, workplace conservation awareness, training and educational workshops and seminars, and public and peer recognition.

Power Smart successfully hosted its premier events, the Power Smart Forum and Power Smart Excellence Awards. The Power Smart Forum had record breaking attendance of more than 700 people, an increase of over 100 per cent from 2007.

### Commercial

New initiatives were launched in fiscal 2009 including data server virtualization, adaptive street lighting and continuous optimization which helps customers to assess, manage and understand energy usage and impacts within their buildings.

# ENERGY CONSERVATION AND EFFICIENCY

For small and medium business (SMB) customers, BC Hydro offers the Product Incentive Program which provides SMBs financial incentives to retrofit existing, inefficient technologies with over 20 different energy-efficient products. BC Hydro expanded the Product Incentive Program by targeting small, hard-to-reach commercial customers. In partnership with the Ministry of Energy, Mines and Petroleum Resources, BC Hydro completed facility walk-through assessments at no cost to SMB customers as well as the installation of pre-rinse spray valves in commercial kitchens.

BC Hydro has partnered with British Columbia Institute of Technology (BCIT) to launch a series of part-time studies courses in Sustainable Energy Management. These courses are designed to support employment opportunities in the emerging field of sustainable energy management, with focus on energy demands of commercial and institutional buildings.

## Industrial

For the industrial sector, the Power Smart Partners – Transmission program focused specifically on activities that allow customers to take advantage of the stepped rate structure. The Power Smart Partners – Distribution Program has also been updated to meet the specific needs of industrial customers under the distribution rate.

The new Industrial New Plant Design Program addresses energy efficiency opportunities in new industrial construction in B.C. The outlook for new plant savings opportunities remains positive in water, wastewater and some other sectors, despite the slowdown in several sectors due to the current economic climate.

## Local Government and Communities

BC Hydro is continuing to establish itself as a leader in working with community organizations and local municipalities to increase the knowledge and a feeling of responsibility around energy conservation and efficiency.

We initiated several pilot projects, research work and focus groups to help develop our initiatives. Project Porchlight is one example of a local partnership in which BC Hydro partnered with One Change, the Northern Environmental Action Team and EnCana, to distribute CFL bulbs via volunteers in Northern B.C. In addition, our Power Smart Community Network has provided regional reach and has created, implemented, and supported local projects throughout the province. BC Hydro also supported municipalities and developers in implementing community-wide energy strategies as part of their planning process.

## CODES AND STANDARDS

In fiscal 2009, BC Hydro worked with federal and provincial government agencies to support and influence new federal product standards that were recently announced and are estimated to save 1,050 GWh by 2020. In addition, we supported provincial regulation of general service lighting, electric water heaters and industrial motors which is targeted for approval in fiscal 2010. BC Hydro played an important role in supporting and influencing the implementation of a new green B.C. Building Code which took effect September 2008 and we were also a key participant in reshaping the next National Energy Code for Buildings to be tabled for discussion in 2010.

## TECHNOLOGY

BC Hydro has initiated technology demonstration projects and participated in several studies on emerging technologies and strategic topics. Several technologies were adopted into marketing programs this year, including adaptive street lighting, high flux LED lighting for area lighting retrofits, and lighting for refrigerated cases in grocery stores. New partnerships have been established – we are a participant in the Office of the Future consortium led by California and other U.S. utilities; BC Hydro is working with the University of British Columbia (UBC) and the mining industry to develop a research program to improve energy efficiency in metal mining; and we have been a catalyst to initiate discussion and sharing of information on emerging technologies among some 15 utilities and organizations across North America.

## CONSERVATION RATE STRUCTURES

New conservation rate structures are part of BC Hydro's three-pronged approach to conservation. As a result of BC Hydro's residential rate design application, the BCUC approved a two-step inclining block rate structure in August 2008. The new Residential Conservation Rate is designed to encourage conservation among residential customers and became effective on October 1, 2008. BC Hydro is currently in the design stage of a new conservation rate structure for large general service customers and expects to file this new rate structure with the BCUC in fiscal 2010. The BCUC also approved BC Hydro's Transmission Service Rate Re-pricing application to re-price

# ENERGY CONSERVATION AND EFFICIENCY

Industrial Tier 2 rates to reflect the average cost of new supply, effective April 1, 2008. The Transmission Service Stepped Rate has been in place since April 2006.

## POWER SMART STUDENTS PROGRAM

The Power Smart Schools Program educates B.C. students on the benefits of energy conservation and sustainability. In fiscal 2009, the program reached more than 18,000 students in 48 school districts. The Energy Detectives program, for Kindergarten to Grade 3 students, was translated into French. It features a storybook, *Smarty and the Energy Detectives: The Mysterious Equation*, containing conservation and electrical safety messages and meets Ministry of Education Prescribed Learning Outcomes. In addition over 1,500 students from 35 schools in Fort St John, Prince George, Kamloops, Revelstoke, Courtenay and Langley participated in the Free Spirit Conservation Tour to raise awareness of energy conservation within B.C.

BC Hydro also delivered electrical safety education workshops to Grade 2 and Grade 6 teachers in BC Hydro's service territory. As part of an Electrical Safety for Trades Students pilot program, we also developed and delivered 23 presentations to six post-secondary schools.



*Students at Semiahmoo Secondary School in Surrey involved in BC Hydro's Energy Ambassadors program for Grades 10 to 12. In the Energy Ambassadors program, students work in teams to discover how efficiently their schools use energy and to identify opportunities to save energy. The teams then use what they learn to encourage change by delivering workshops to elementary students and by undertaking energy conservation initiatives in their school communities. They also develop recommendations to improve energy efficiency for their School Board of Trustees.*

## INVENT THE FUTURE

"Invent the future.ca" was developed in 2008 as an evolution to the Off the Grid youth contest held in 2007. Youth between ages 13 to 29 were asked to submit an idea for a sustainable product or lifestyle change that would reduce energy consumption for all of B.C. The idea was to reach an audience interested in sustainability, climate change and energy conservation. Ideas were submitted as either a 30-60 second video or a short essay. This province-wide contest attracted a total of 148 entries. Submissions for the contest can be viewed at [www.inventthefuture.ca](http://www.inventthefuture.ca).





# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

Just as with Safety, BC Hydro recognizes that the operation of the electrical power system can be hazardous and the risks must be actively managed to protect people, property and the environment. BC Hydro is committed to producing, acquiring, delivering and consuming electricity in an environmentally, financially and socially-responsible manner. We recognize that environmental risks are associated with our work and we have a system in place to manage those risks in a consistent and conscientious way.

In fiscal 2009, we made significant progress in three key areas. Fish habitat: our efforts have finally made improvements upstream of the Coquitlam Dam where we saw fish returning to their habitat for the first time in 80 years. Water Use Planning: we continuously take input from stakeholders to ensure that we consider the environment as well the needs of people around our sites. Triple bottom line thinking: we are minimizing our footprint and leaving the environment in a better place than today for future generations by including structured decision making in all of our business cases.

BC Hydro's climate change strategy includes a focus on reducing emissions first and relying on offsets second. BC Hydro expects to purchase GHG offsets to meet new provincial regulatory requirements and potentially to meet new Service Plan emissions targets in advance of regulatory need. Starting in 2010, BC Hydro is required to offset annual emissions from the vehicle fleet, building energy use and paper use by purchasing offsets through the Pacific Carbon Trust to meet the B.C. Carbon Neutral Government Regulation.

## ENVIRONMENTAL IMPACT GOAL

To progress towards our goal of 'no net incremental environmental impact', air, land and water metrics were developed and tested at fourteen sites in fiscal 2009. This data will be used in fiscal 2010 and combined with additional information to create a complete set of baseline impacts.

## CLIMATE CHANGE

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the unavoidable physical impacts of climate change.

The LTAP submitted to the BCUC in June 2008 proposes the lowest carbon intense portfolio BC Hydro has ever identified as being cost-effective, including Power Smart, Resource Smart and clean or renewable energy purchases. In addition, greenhouse gas emission reduction targets have been established for the first time in the 2009/10 to 2011/12 Service Plan.

BC Hydro has been voluntarily reporting annual GHG emissions since 1995 in accordance with international best practices such as the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol. We are well-prepared to respond to mandatory reporting requirements anticipated to come into effect as early as 2009.

In the first three months of calendar year 2008, a build up of ice on the Peace River resulted in the inability to run our Peace River facilities and caused us to rely on the Burrard Thermal Generating Station to meet winter load. As a result, direct GHG emissions from electricity generation were higher in 2008 than in 2007. Indirect GHG emissions in 2008 were comparable to 2007.

# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## GREENHOUSE GAS EMISSIONS

SOURCE	GHG EMISSIONS BY CALENDAR YEAR (KT CO <sub>2</sub> E)				
	2004	2005	2006	2007	2008
<b>Scope 1 Direct Emissions</b>					
Stationary combustion (electricity generation)	454	284	581	293	382
Stationary combustion (space heating)	3	3	3	4	4
Mobile combustion (fleet vehicles)	16	16	16	20	20
Fugitive emissions (SF <sub>6</sub> releases)	11	9	11	10	10
<b>Total Scope 1 Direct Emissions</b>	<b>483</b>	<b>312</b>	<b>612</b>	<b>326</b>	<b>417</b>
<b>Scope 2 Energy Indirect Emissions</b>					
Stationary combustion (electricity and steam consumed by BC Hydro)	1	1	1	1	1
<b>Total Scope 2 Energy Indirect Emissions</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Scope 3 Other Indirect Emissions</b>					
Stationary combustion (electricity purchased from Independent Power Producers)	967	1,082	765	1,093	1,119
Mobile combustion (business use of personal vehicles)	1	1	1	1	1
<b>Total Scope 3 Other Indirect Emissions</b>	<b>969</b>	<b>1,084</b>	<b>766</b>	<b>1,095</b>	<b>1,121</b>

### Notes:

BC Hydro reports greenhouse gas emissions on a calendar year consistent with international best practices, protocols and emerging mandatory reporting requirements.

Greenhouse gas (GHG) emissions are reported in carbon dioxide equivalent metric kilotonnes (kt CO<sub>2</sub>e).

GHG emissions are rounded to the nearest integer. Totals may not add up due to rounding.

Direct and energy indirect GHG emissions are reported for facilities that are under BC Hydro's operational control.

GHG emissions associated with the corporate operations of wholly-owned subsidiaries Powerex Corp. and Powertech Labs Inc. are included.

GHG emissions due to electricity imports are not included.

Fugitive SF<sub>6</sub> emissions from equipment under operational control of the BC Transmission Corporation are not included.

In anticipation of meeting carbon neutral government requirements, BC Hydro is accounting for indirect life-cycle emissions associated with the consumption of 8.5" by 11" paper. In calendar year 2008, these emissions were estimated to be 0.2 kt CO<sub>2</sub>e.

Direct and indirect emissions cannot be added to arrive at total emissions. For the purpose of target-setting, the BC Hydro Service Plan 2009/10-2011/12 contains two GHG metrics:

"GHG Emissions" include all Scope 1 emissions and Scope 3 emissions from electricity purchased from Independent Power Producers; and

"Carbon Neutral Program Emissions" include emissions from stationary combustion (space heating), mobile combustion (fleet vehicles), stationary combustion (electricity and steam consumed by BC Hydro) and consumption of 8.5" by 11" paper.

Where historical GHG emissions do not match previously reported values, emissions have been recalculated due to changes in inventory scope, improvements in data collection and/or updates to emission factors. For more details, please refer to the fiscal 2009 Global Reporting Initiative tables at [www.bchydro.com/about/company\\_information/reports.html](http://www.bchydro.com/about/company_information/reports.html).

In our own operations, we have identified measures to achieve carbon neutrality in corporate operations and have implemented actions including greening the fleet and building changes. Another example, as part of the requirements for the public sector carbon-neutral requirements, BC Hydro has moved to the use of 100 per cent recycled paper. For more information on our Lead by Example programs see page 43.

# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## CLEAN ENERGY TARGET

The BC Energy Plan directs BC Hydro to ensure that clean or renewable electricity generation continues to account for at least 90 per cent of total generation. This year, clean or renewable generation accounted for 94 per cent of BC Hydro's electricity supply. To supplement the power from its heritage assets, BC Hydro acquires clean electricity from IPPs located in B.C. BC Hydro undertook three power call processes in fiscal 2009 to acquire additional sources of clean or renewable electricity, including Phase 1 of the Bioenergy Call for Power, the Clean Power Call and the Standing Offer Program. More information on these calls can be found on page 40.

## ENVIRONMENTAL MANAGEMENT

In fiscal 2009, we introduced a more modern Environmental Risk Management and Reporting Framework that provides a consistent structured approach to Environmental Risk Assessment. To analyze risks and identify points where they can be controlled, the framework uses highly visual software to illustrate identified hazards and risk management measures.

Three pilot projects to implement the new Framework were completed in fiscal 2009. The pilots highlighted and communicated the responsibility for risk management to the operations side of our business.

Environmental incidents are communicated and reported internally through the Environmental Incident Reporting (EIR) system, which provides information to manage incidents, identify trends and track actions, and helps us address underlying issues to prevent future incidents. This year we also evaluated the relative risk of environmental consequences using the Environmental Risk Calculator. Of the 257 incidents reported in fiscal 2009, a decrease of seven over the previous year, the majority of incidents had almost no to low environmental consequence. Of the reported incidents, the majority that occurred were due to contaminant releases (eg. oil spills), followed by de-watering and electrical contacts (i.e. bird strikes). There were no reported environmental incidents with a calculated environmental consequence of moderate to high. Low, moderate and high impacts are determined using a relative consequence scale to assess the level of impact at any given moment. For example, the dewatering of a spillway may result in an environmental consequence with relatively low impact one day, but on another day, when a fish run is occurring, may result in an environmental impact of relatively high consequence. Each incident is analysed using a standard set of questions and the level of impact assessed.

Environmental risks, such as the release of hazardous materials into the environment or harm to fish and wildlife habitat, are managed through our Environmental Management System (EMS) by using barriers and controls as a first line of defence to prevent environmental impact, with effective mitigation strategies in place should preventative measures fail. Potential environmental hazards such as the use of lubricating oil at generating stations and the need to manage vegetation in riparian areas are identified, tracked, and managed. We use the EMS every day to apply a consistent, systematic and integrated approach to decision making and work planning.

### CLEAN ENERGY

#### Percentage

	F2008	F2009	F2010
Target	90	90	90
Actual		94	

BC Hydro established the Clean Energy measure as a minimum threshold target in accordance with the B.C. Government's requirement that at least 90 per cent of electricity generation in the province should be clean or renewable electricity—i.e., from biogas, biomass, energy recovery generation, geothermal, hydrocarbon, hydro, hydrogen, municipal solid waste, solar, tidal, wave, wind or other potential clean or renewable electricity sources recognized by the B.C. Government. The 90 per cent minimum threshold ensures that we maintain and try to improve upon our current performance.

The fiscal 2009 actual percentages are representative of where the system has been tracking for the previous five years. The Clean or Renewable Energy measure reflects the above average hydro production that was due to higher than normal inflows and net market exports from the system.

# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## FLEET VEHICLE EMISSIONS REDUCTIONS

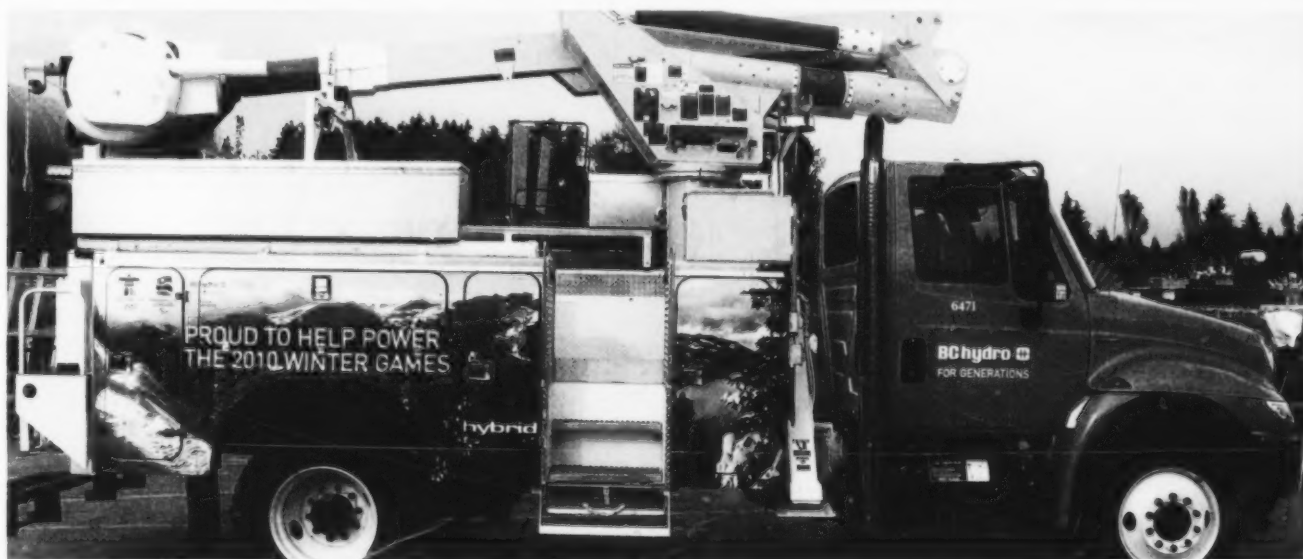
BC Hydro continues to introduce new vehicle and driver-related initiatives to ensure we will comply with the provincial government's policy on carbon neutrality and the reduction of greenhouse gas emissions.

Our fleet now includes 53 hybrid sedans and 50 hybrid SUVs. We introduced an International diesel-electric hybrid line truck in November 2008. Over 200 fleet vehicles are participating in a biodiesel program in the Lower Mainland and on Vancouver Island. This year, we installed Telematics, a data management system that gathers information about vehicle operations in a non-invasive way, in 100 of our fleet vehicles. It will collect data on vehicle fuel consumption, drive cycles and idling times. The study will sample different vehicle classes as well as each of our operating regions over the next year, to assess the use of our vehicles, how they are being driven and how much fuel is used, in order to make future purchasing and driver education decisions.

We are participating in a vehicle pilot partnership with the provincial government as part of a one year case study on the impacts of Production Plug-In Hybrid Vehicles. This year, we integrated eco-friendly driving tips into our safety-related driving programs for all BC Hydro vehicle operators.

## ELECTRIC VEHICLE INFRASTRUCTURE GUIDELINES

As part of our participation in research and development in new technologies, BC Hydro is developing a set of guidelines for the installation of electric vehicle charging infrastructure in B.C. The guidelines are a critical step toward the green transformation of the transportation sector in B.C. and in Canada. We have also converted three hybrid vehicles to plug-in hybrid electric vehicles.



*BC Hydro's new hybrid line truck hit the road in style in November 2008. The vehicle was seen sporting the new BC Hydro branding as an official supporter for the Vancouver 2010 Olympic and Paralympic Winter Games when it rolled off the lot at its launch.*

# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## RECYCLING AND WASTE MANAGEMENT

The sustainable management of waste and recyclable materials from our business is an important part of our overall strategy to reduce environmental impacts from our operations. In fiscal 2009, the materials handled through the Surrey Materials Management Business Unit Investment Recovery Department included 6,047 tonnes of nonhazardous materials, such as scrap metals, wood and paper, that were diverted from landfills. This is a decrease of 10 per cent from the previous year. A large contributing factor is scrap metal which went from 4,959 tonnes to 3,881 tonnes, partially due to new federal regulations coming into place. The result is a landfill diversion rate of 69 per cent, down from the fiscal 2008 rate of 77 per cent.

## MANAGING POLYCHLORINATED BIPHENYLS (PCBS)

A large portion of BC Hydro's electrical equipment (approximately 70 per cent) contains PCB-contaminated oil. BC Hydro is reducing the amount of PCBs in use within the Distribution and Generation Systems on an on-going basis through planned equipment upgrades and replacements with new non-PCB containing units. We have begun to test switchyard equipment for PCB content, as well as phasing out other equipment that contains 50 parts per million or more PCBs to be in compliance with new Federal PCB Regulations by the end of 2025.

In fiscal 2009, BC Hydro completed a four-year testing program aimed at identifying the location of PCB-contaminated padmount transformers. Approximately 1,000 of these transformers were found to have PCBs over regulatory thresholds. A plan has been implemented to replace units that have high levels of PCBs or which are located in sensitive areas, such as near schools and hospitals, by December 31, 2009. Seventy-two of the 135 transformers have been replaced as of March 31, 2009. This action will conform to the PCB phase out requirements of the new Federal PCB Regulations which were enacted in September 2008.

## RESOURCES RECOVERED AND SOLID WASTE

	F2005	F2006	F2007	F2008	F2009
Total Resources Recovered (tonnes)	3,934	4,308	4,527	6,818	6,047
Landfill Diversion Rate (non-hazardous solid waste) (percentage)	NR	77%	77%	77%	69%

Note: The statistics shown above reflect materials flowing through BC Hydro's Materials Distribution Center in Surrey and do not represent all of BC Hydro's waste disposal and recycling. Waste disposal and recycling at other BC Hydro locations is not tracked at this time.

Total resources recovered decreased in fiscal 2009 in part due to a reduction in scrap metal sent for recycling, the disposal of a large number of toner cartridges in fiscal 2008 and a reduction in the amount of e-resources recovery likely due to a decrease in the quantity of equipment slated for replacement. Recycling of ceramic insulators, woodpoles and cardboard increased in fiscal 2009. The increase in fiscal 2008 is due to a change in the tracking of scrap Poles for recycling that began at the BC Wood Recycling facility, the increase in BC Hydro capital replacement projects, write-offs and the disposal of unusable spare equipment. It is also due to the increased tracking across BC Hydro of materials returning from the field.

The increase in solid waste to landfill is largely due to the disposal of wood waste from B.C. Wood Recycling. The majority of this was from the disposal of pine poles that have no value if milled. Other materials that contributed to this increase were contaminated media (soil, gravel & sandblast material) and regular garbage.

Landfill diversion rate estimates the percentage of total solid (non-hazardous waste) prevented from going to landfill due to reuse, refurbishment or recycling.



# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## MANAGEMENT OF CONTAMINATED SITES

BC Hydro owns a large number of sites, both operating and dormant. Some of these sites have been contaminated as a result of past industrial or operating practices. We continue to investigate these sites, prioritize them based on risk, and implement management strategies that consider triple bottom line principles. In fiscal 2009, an audit confirmed that the management of contaminated sites is in-line with industry norms.

## ROCK BAY REMEDIATION PROJECT

The Rock Bay Remediation project is BC Hydro's most complex historic contaminated site, dating from the 1860s. A joint undertaking with Transport Canada to remediate the site, located in Victoria, began in 2004. While the agreements with Transport Canada expired in 2008, technical communications continue. Coal tar-contaminated soil was removed in two stages, as was some residual PCB-contaminated soil. Some of the soil remains in a secure, permitted storage facility on site and will be treated and disposed of in the future as part of ongoing environmental restoration activities for Rock Bay. Applications are in process with the provincial Ministry of Environment to obtain Certificates of Compliance covering BC Hydro property, and testing required for that application is continuing. Efforts are also underway to re-open discussions with Transport Canada regarding ongoing remediation work.

## WATER USE PLANNING

The Water Licence Requirements ([www.bchydro.com/planning\\_regulatory/water\\_use\\_planning.html](http://www.bchydro.com/planning_regulatory/water_use_planning.html)) (WLR) Program is responsible for delivering the monitoring studies and physical works contained in the Section 88 orders issued by the Comptroller of Water Rights. BC Hydro began implementing the WLR projects in 2006 with the Coastal and East Kootenay watersheds.

BC Hydro initiated many Columbia WLR projects in fiscal 2009. Monitoring and physical works projects were implemented on Kinbasket, Revelstoke and Arrow reservoirs and the Lower Columbia River. Over 40 of the approximately 115 projects delivered in fiscal 2009 were on the main stem of the Columbia River. The range of projects address issues related to various species of fish including all species of salmon, sturgeon, trout, sculpin, dace, as well as, wildlife, recreation, water quality, industrial operations, archaeology, debris management, and erosion protection.



In July 2008, young salmon were released down the Kootenay River as part of a project to assist with the migration and spawning of the summer chinook salmon. With the river in flood, thanks to the weather and the release of water from the Kinbasket and Revelstoke reservoirs, the fish were able to pass the rapids of the Kootenay River and reach the mouth of the river.

# CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

## COMPENSATION AND RESTORATION

In partnership with the BC Ministry of Environment, Fisheries and Oceans Canada, First Nations and community stakeholders, BC Hydro has established compensation programs to mitigate the impacts on fish and wildlife resulting from the construction and operation of our generation facilities.

### Fish and Wildlife Compensation Program:

BC Hydro provided \$4.9 million to support 11 fisheries and eight wildlife projects.

### Bridge Coastal Fish and Wildlife Restoration Program:

The program invested \$1.5 million in over 23 projects, 15 fish and eight wildlife research and enhancement in southwest B.C.

### Peace Williston Fish and Wildlife Compensation Program:

More than \$1.3 million was spent on 17 fish and nine wildlife projects and compensation program delivery to protect and enhance fish and wildlife habitat, populations and resources.

## SPECIES AT RISK

Many BC Hydro facilities and operations interact with species and ecosystems at risk. Effectively managing these interactions is an ongoing, company-wide effort. BC Hydro uses various procedures to manage potential interactions with species and ecosystems at risk, such as the following species listed under the federal *Species at Risk Act*: the Columbia White Sturgeon, the Nooksack Dace, the Vancouver Island Marmot, the Woodland Caribou, the Western Screech-Owl, the Northern Leopard Frog and the Great Blue Heron.

Efforts include development and implementation of recovery programs for species at risk; specific site environmental management practices for various activities to avoid and mitigate impacts for species at risk; acquisition of properties to conserve and recover biodiversity in sensitive areas; active involvement in organizations and partnerships such as the Canada Intermountain Joint Venture, the North American Bird Conservation Council and the B.C. Wetland Stewardship Partnership and; membership in federal species at risk policy and regulatory associations.

An example of our work is with the Columbia White Sturgeon. BC Hydro, through its Water Licence Requirements Program, is implementing a 12-year, \$33 million, research and monitoring program towards recovery of Columbia River White Sturgeon in Canada. This program will fill critical knowledge gaps in basic biological information at various life history stages; determine annual levels of natural recruitment in both the mid and lower Columbia River; describe the habitat used at different life stages and determine how this habitat is affected by fluctuating river flows; and develop a conservation aquaculture program to supplement both the mid and lower Columbia River with hatchery produced larvae and juveniles. Results from this long-term research program will provide a framework for evaluating and developing adaptive management strategies for white sturgeon in the Columbia River and elsewhere.

## FINANCIAL TARGETS



### GUIDING PRINCIPLE:

To maintain the existing position of having costs among the lowest in North America and to deliver 100 per cent of forecast net income on an annual basis.

*The Aberfeldie Generating Station is one capital project BC Hydro is undertaking to upgrade its system. In this photo, the team (from left to right on the walkway: Rob Adams, Knight Piesold Ltd., Electrical Mechanical Designer; Jim Harkoff, Construction Manager; Doug Baker, Project Manager; and Marcos Morcado, Safety Officer) celebrates a project milestone, the wet testing of the plant water conveyance system on October 15, 2008. Water flow is approximately 20 cubic meters per second exiting the Environmental By-Pass Facility (EBF) into the tailrace.*

The significant economic events in the latter half of the fiscal year have had some impacts on our business. For example, our load forecast was adjusted downwards reflecting reduced economic activity, in particular, with our industrial customers. Other impacts included the increase in credit risk associated with our customers and market risks for energy transactions. To date, our risk management practices such as the load forecast reduction mentioned above have proven to identify, quantify and mitigate these risks as appropriate.

Not all of the impacts however have been negative. We have started to experience a declining rate of employee attrition and increase in the number of applications for externally posted positions - reducing our concerns around talent shortage. We continue to focus on our strategic and operational priorities to be able to deliver on most of the milestones as set out in our Service Plan. While adjusting to immediate events, our long-term strategy and role in providing leadership and being a strong presence in our province remains unchanged.

### STRATEGIES IN THE 2008/09 – 2010/11 SERVICE PLAN

In last year's Service Plan, we stated we would focus on filing our next Revenue Requirements Application with the BCUC. BC Hydro did seek a cumulative general rate increase in order to:

- acquire additional clean and renewable energy as well as higher cost market purchases to meet increasing demand;
- upgrade and expand our infrastructure to ensure the long-term security of our electricity supply;
- meet our obligations for First Nations consultation and implementing agreements;
- continue to maintain and improve BC Hydro's personnel and infrastructure safety; and
- prepare for a shrinking labour pool by investing in hiring and retaining highly qualified employees.

We also stated we would work to:

- manage the short-term cost of energy by optimizing decisions of "buy versus generate";
- optimize the long-term cost of energy by implementing the 2006 Integrated Electricity Plan, and the Long-Term Acquisition Plan, which include conducting future competitive market calls for energy from IPPs in order to get the best price for energy;
- enhance prioritization, execution and reporting of capital spending across BC Hydro while upgrading and maintaining our Heritage Assets;
- implement productivity projects focusing on rationalizing IT systems, procurement and work management processes; and
- implement a new 20-year demand side management plan.

# FINANCIAL TARGETS

Over the long-term, these strategies are aimed at sustaining a cost advantage by:

- making good business decisions that enhance productivity;
- delivering an effective capital investment program;
- procuring new supply at a low total cost; and
- optimizing BC Hydro's balance sheet and cost of capital.

Despite the economic downturn in fiscal 2009 BC Hydro exceeded its net income performance target for the year, with results benefiting from higher energy trading income. We were also able to achieve a return on equity of approximately 12 per cent. However, we did not meet six of the 10 other financial performance and operating efficiency targets due to lower operating income (before regulatory accounts), higher operating costs, and a higher debt to equity ratio. Operating income was impacted by lower domestic margins due to reduced revenues from the large industrial sector as a result of weakness in the forest industry, together with higher costs for energy purchases due to lower than average water inflows during the year. Unplanned outages also contributed to reduced generation levels and resulted in higher than planned maintenance costs in the year. Higher debt levels are the result of significant capital expenditures required as part of our ongoing program to meet load growth requirements and maintain our aging infrastructure.

## NET INCOME \$ in millions



Net income is defined as total revenue less total expenses after regulatory account transfers and represents the net impact of key economic and business factors that affect BC Hydro's performance.

Regulatory account transfers defer to future periods the recognition of costs or revenues that under Generally Accepted Accounting Principles, in the absence of rate regulation, would otherwise be recorded in the current accounting period. The deferred amounts are either recovered from or refunded to ratepayers through BCUC approved rate adjustments in future periods.

For fiscal 2009, BC Hydro's net income was \$366 million, compared to \$369 million in the previous year. This resulted in a return on equity, based on equity as defined for regulatory purposes, of 11.75 per cent compared with 11.33 per cent for fiscal 2008.

## ENERGY TRADING ACTIVITIES

Trade revenues for the year ended March 31, 2009 increased by \$189 million over the previous year due to both electricity and gas activities. Electricity revenues reflect higher sales prices offset by a decrease in gross electricity sales volume of 13 per cent. Electricity sales prices increased as Powerex increased sales in the U.S. Southwest and in Alberta during peak times while a decrease in sales volumes reflected diminishing spreads in U.S. markets in the latter half of the year. Higher gas revenues reflected an increase in gas sales prices of eight per cent as well as a 27 per cent increase in gas sales volumes. The increase in gas sales prices was driven by increased supply concerns in the early part of the year while the increase in volumes reflected Powerex's strategy to grow its gas business.

## REGULATORY

Significant regulatory activity for BC Hydro continued in fiscal 2009. The British Columbia Utilities Commission (BCUC) issued decisions on the fiscal 2009/2010 Revenue Requirements Application and the Residential Inclining Block Rate Application. BC Hydro submitted its 2008 Long Term Acquisition Plan (LTAP) to the BCUC and an oral hearing took place in March 2009. Details of these and other filings are outlined in the following table:

## FINANCIAL TARGETS

Application / Filing	Details	Status												
Fiscal 2009/2010 Revenue Requirements Application (RRA)	<p>BC Hydro filed an application in February 2008 requesting rate increases of 6.56 per cent on April 1, 2008, and 8.21 per cent on April 1, 2009. The main cost drivers for these rate increases were the increasing cost of energy purchases to meet domestic needs, the increased level of capital expenditures, and the inflationary and growth pressures on operating costs.</p> <p>The BCUC approved an interim rate increase of 6.56 per cent effective April 1, 2008, and the proposed reduction of the deferral account rate rider from two per cent to 0.5 per cent.</p> <p>A three week oral public hearing was held in October 2008. The application was updated during the hearing to reflect the recent global economic downturn and its impact on BC Hydro's revenues and costs. These changed circumstances resulted in BC Hydro amending its requested rate increases to 3.75 per cent in fiscal 2009 and 10.17 per cent in fiscal 2010.</p> <p>The BCUC issued its decision on March 13, 2009 approving rate increases of 2.34 per cent as of April 1, 2008 and 8.74 per cent as of April 1, 2009. The difference between the 6.56 per cent interim rate increase for fiscal 2009 and the 2.34 per cent increase is to be refunded to customers.</p> <p>The BCUC directed a number of new regulatory accounts be established to deal with the near-term economic uncertainty which will reduce BC Hydro's financial risk in this volatile environment.</p> <p>Even with these new rate increases, BC Hydro's rates would still remain among the lowest in North America.</p>	Following the decision BC Hydro has adjusted its rates as of April 1, 2009 accordingly and is crediting refunds for fiscal 2009 to customers' accounts.												
Residential Inclining Block (RIB) Rate	<p>BC Hydro filed an application in February 2008 for a new rate structure for residential customers. A two-step rate was proposed, with the Step-2 rate price higher for all energy consumption over a certain kWh amount per bimonthly billing period.</p> <p>The BCUC approved the two-step RIB rate effective October 1, 2008 setting the Step 1 threshold at 1,350 kWh and capping the Step 2 rate at BC Hydro's long-run cost of supply.</p> <p>Subsequent to the release of its decision on BC Hydro's fiscal 2009/10 RRA, the BCUC-approved RIB rates for fiscal 2009 and fiscal 2010 are as follows:</p> <table> <tr> <th></th><th>F2009</th><th>F2010</th></tr> <tr> <td>cents/kWh</td><td></td><td></td></tr> <tr> <td>Step 1</td><td>5.46</td><td>5.91</td></tr> <tr> <td>Step 2</td><td>7.21</td><td>8.27</td></tr> </table>		F2009	F2010	cents/kWh			Step 1	5.46	5.91	Step 2	7.21	8.27	
	F2009	F2010												
cents/kWh														
Step 1	5.46	5.91												
Step 2	7.21	8.27												



# FINANCIAL TARGETS

Application / Filing	Details	Status
Residential Inclining Block (RIB) Rate <i>continued</i>	The Step 2 rate better reflects the long run cost of new energy supply and provides an effective price signal to encourage energy conservation and efficiency. While the rate is designed to be revenue neutral to the residential rate class, individual customers will see bill impacts, which can be mitigated through consumption behaviour changes and participation in BC Hydro's Power Smart programs.	
2008 Long Term Acquisition Plan (LTAP)	<p>The 2008 LTAP application was filed with the BCUC on June 12, 2008. An evidentiary update to the application was filed in December 2008, including an updated forecast of electricity demand. A three week oral hearing was held in February/March 2009.</p> <p>The purpose of the LTAP is to identify sufficient resources to reliably serve the growing demand for electricity service within the BC Hydro service area and to inform and guide BC Hydro's resource acquisition processes over the first 10 years of a 20-year study horizon. The framework for the 2008 LTAP is based on recent changes to the Utilities Commission Act that reflect the government's energy objectives.</p> <p>Key elements of BC Hydro's LTAP requests are:</p> <ul style="list-style-type: none"> <li>• Demand-side management planned expenditures of \$418 million for fiscal 2009 to fiscal 2011;</li> <li>• Pre-attrition target for the Clean Power Call of 3,000 GWh/year;</li> <li>• Burrard reliance for planning of 900 MW of dependable capacity and 3,000 GWh/year of firm energy; and</li> <li>• Approval of the upgrade to the Fort Nelson generation station.</li> </ul>	A decision by the BCUC on this application is expected early this summer.
Standing Offer Program (SOP)	<p>BC Hydro's standing offer program establishes a standing offer for power produced from clean electricity projects up to 10 megawatts, and is in accordance with Policy Action No. 11 of the BC Energy Plan. A negotiated settlement on the terms and conditions of this program was reached with BC Hydro's customer groups and stakeholders and subsequently approved by the BCUC in March 2008.</p> <p>During fiscal 2009, BC Hydro received and applied the SOP rules to 12 applications and signed one SOP Electricity Purchase Agreement.</p>	
Bioenergy Call (Phase I)	BC Hydro issued its Phase I Request for Proposals in late fiscal 2008. After an extensive review process of the 20 proposals received, four Electricity Purchase Agreements (EPAs) were awarded in December 2008 for 579 GWh/year of firm energy and 60 MW of dependable capacity. The awards are consistent with a number of policy actions directed by government in the BC Energy Plan. These EPAs were filed with the BCUC on February 17, 2009 and are currently being reviewed.	

## FINANCIAL TARGETS

### PROCUREMENT ENHANCEMENT

BC Hydro's Procurement Enhancement program made significant progress with the Procure to Pay project and the Strategic Sourcing initiative in fiscal 2009. New design processes were confirmed and implementation completed with roll-out in April 2009. These processes were introduced to employees who are involved in the initiating, processing, sourcing, receiving or approving of goods and services. In fiscal 2009 the Strategic Sourcing program realized savings of almost \$3 million from contracts that had been put in place to date. Additional contracts have been entered into in the year with anticipated savings of \$25 million over the various contract terms. These contracts were for three-phase distribution transformers; poles; wheel to wheel fuel services; light & medium duty vehicles; and employee relocation services.

# FINANCIAL RESULTS

## MANAGEMENT DISCUSSION AND ANALYSIS MARCH 31, 2009

The Management Discussion and Analysis reports on British Columbia Hydro and Power Authority's (the Company) consolidated results and financial position for the year ended March 31, 2009 [fiscal 2009]. This discussion should be read in conjunction with the audited consolidated financial statements and related notes of the Company for the years ended March 31, 2009 and 2008. The financial statements have been prepared in accordance with Canadian generally accepted accounting principles (GAAP) and are expressed in Canadian dollars. This report contains forward-looking statements, including statements regarding the business and anticipated financial performance of BC Hydro. These statements are subject to a number of risks and uncertainties that may cause actual results to differ from those contemplated in the forward-looking statements.

BC Hydro's results for fiscal 2009 benefited from increased income from energy trading activities, but were adversely impacted by lower domestic revenues, higher energy costs, higher amortization expense and higher finance charges compared to the prior year. Certain differences between planned and actual amounts are transferred to regulatory accounts for inclusion in future rates.

### HIGHLIGHTS

- Net income for the year ended March 31, 2009, was \$366 million compared to \$369 million in the prior year. This resulted in a return on equity, based on equity as defined for regulatory purposes, of 11.75 per cent compared with 11.33 per cent for fiscal 2008.
- On March 13, 2009, the British Columbia Utilities Commission (BCUC) issued a final decision with respect to BC Hydro's F2009/2010 Revenue Requirements Application (RRA). The BCUC approved a rate increase for fiscal 2009 of 2.34 per cent and a 0.5 per cent rate rider for the purpose of recovering a portion of the current balances in the deferral accounts. Both are effective April 1, 2008. The BCUC also directed that the difference between the interim rate and the final rate be refunded to customers.
- Hydro generation levels for the year ended March 31, 2009 were 14 per cent lower than in the prior year as a result of lower than average system inflows into system reservoirs compared with higher than average inflows in the prior year. To continue to meet domestic load requirements, BC Hydro was required to purchase more energy from the market which is more expensive than energy generated from its system, increasing the overall cost of energy. This was partially offset by reduced load as a result of lower sales to large industrial customers primarily as a result of closures of pulp and paper mills due to weakness in the forestry sector.
- Property, plant and equipment expenditures of \$1,400 million are 30 per cent higher than the prior year (\$1,076 million) primarily due to the Vancouver Island Transmission Reinforcement project, Revelstoke Unit 5 installation and system improvements to the distribution network. This is a positive result given BC Hydro's significant capital expenditure requirements over the next several years in order to be able to continue to meet load growth requirements and maintain its aging infrastructure.

## FINANCIAL RESULTS

For the year ended March 31

(in millions)

	2009	2008	Change
Total Assets	\$ 16,368	\$ 14,447	\$ 1,921
Shareholders' Equity	\$ 2,189	\$ 1,921	\$ 268
Income (Loss) Before Regulatory Accounts	\$ (72)	\$ 227	\$ (299)
Net Income	\$ 366	\$ 369	\$ (3)
Accrued Payment to the Province	\$ —	\$ 288	\$ (288)
Return on Equity, as defined for regulatory purposes	11.75%	11.33%	0.42%
Debt to Equity ratio, as defined for regulatory purposes	81 : 19	70 : 30	—
Number of Domestic Customers	1,801,038	1,766,937	34,101
GWh Sold (Domestic)	52,512	53,300	(788)
Total Reservoir Storage (GWh)	14,915	14,120	795
Property, Plant & Equipment Additions	\$ 1,400	\$ 1,076	\$ 324

## CONSOLIDATED RESULTS OF OPERATIONS

BC Hydro reports net income (loss) both before and after net changes to regulatory accounts. As a rate-regulated utility, BC Hydro applies various accounting policies that are acceptable under Canadian generally accepted accounting principles (GAAP) for rate-regulated enterprises but differ from enterprises that do not operate in a rate-regulated environment. These policies allow for the deferral of amounts that under GAAP would otherwise be recorded as expenses or income in the current accounting period. The deferred amounts are either recovered or refunded through future rate adjustments.

BC Hydro presents its financial statements on a gross view which shows its results under GAAP in the absence of rate regulation (Income Before Regulatory Account Transfers) and with rate regulation (Net Income). The net change in regulatory accounts on the income statement includes: variances between planned amounts from the most recent revenue requirements application and actual results for cost of energy (including variances related to load) and trade income; certain amounts incurred in the current period that are deferred for future recovery in rates (such as demand-side management expenditures); interest accrued on regulatory accounts where allowed; and amortization of regulatory accounts. As a result, there can be significant differences between income before regulatory account transfers and net income.

For the year ended March 31, 2009, loss before regulatory account transfers was \$72 million compared to income of \$227 million in the previous year. The decrease was a result of lower domestic gross margin, arising from both lower domestic revenues and higher energy costs, amortization expense and finance charges, partially offset by higher trade margins and lower operating costs.

Transfers to regulatory accounts for the year were mainly comprised of transfers to the Heritage Deferral Account related to higher cost of energy than planned and to the demand-side management regulatory account. The BCUC decision on the RRA required BC Hydro to establish new regulatory accounts for the deferral of variances between actual and planned costs for finance charges, taxes, amortization on capital additions, net employment costs included in operating costs and storm-related cost variances, all of which are reflected in the fiscal 2009 results.

Net income for the year ended March 31, 2009 was \$366 million, compared to \$369 million in the previous year. BC Hydro's net income decreased from fiscal 2008 mainly due to lower domestic gross margin and higher operating costs, partially offset by higher trade income and lower finance charges after deferral.

## FINANCIAL RESULTS

### REVENUES

Revenues are influenced primarily by the volume of energy consumed by customers and market prices of energy. Domestic revenues are influenced by variables such as number of customers, average temperatures during the year, level of economic activity in commercial and industrial sectors, and mark-to-market gains or losses on forward energy purchase contracts which are recorded in revenues. Trade revenues are influenced by commodity prices and sales volumes for electricity and natural gas.

	(in millions)		(gigawatt hours)	
	2009	2008	2009	2008
<b>Domestic</b>				
Residential	\$ 1,197	\$ 1,171	17,861	17,553
Light industrial and commercial	1,054	1,054	18,265	18,406
Large industrial	481	536	14,303	15,380
Other energy sales	82	183	2,083	1,961
<b>Total Domestic</b>	<b>\$ 2,814</b>	<b>\$ 2,944</b>	<b>52,512</b>	<b>53,300</b>
<b>Trade</b>				
Electricity – Gross	\$ 2,290	\$ 2,402	32,504	37,450
Less: Forward Electricity Purchases <sup>1</sup>	(1,125)	(1,391)	—	—
Electricity – Spot	1,165	1,011	—	—
Gas – Gross	1,175	858	18,295	14,365
Less: Forward Gas Purchases <sup>1</sup>	(885)	(603)	—	—
Gas – Spot	290	255	—	—
<b>Total Trade</b>	<b>1,455</b>	<b>1,266</b>	<b>50,799</b>	<b>51,815</b>
<b>Total</b>	<b>\$ 4,269</b>	<b>\$ 4,210</b>	<b>103,311</b>	<b>105,115</b>

<sup>1</sup> Forward purchases include derivatives which are deducted from gross sales in accordance with generally accepted accounting principles.

Total revenue for the year ended March 31, 2009 was \$4,269 million, an increase of 1.4 per cent over the previous year mainly resulting from higher trade revenues due to higher average commodity prices and gas sales volumes, partially offset by lower trade electricity sales volumes. Domestic revenues were lower than the prior year due to weakness in the large industrial sector and losses on forward energy purchase contracts which are included in other energy sales.

#### DOMESTIC REVENUES

Total domestic revenues of \$2,814 million for the year ended March 31, 2009 were \$130 million or 4.4 per cent lower than the previous year. The decrease was mainly due to a 1.5 per cent decrease in domestic sales volumes primarily as a result of lower consumption in the large industrial sector due to closures during the year of operations in the pulp and paper sector, and losses on forward energy purchase contracts. This was partially offset by higher average customer rates in all rate classes and an increase in the rate of customer growth.



## FINANCIAL RESULTS

### TRADE REVENUES

BC Hydro's electricity system is interconnected with systems in Alberta and the western United States. Interconnection facilitates sales and purchases of electricity outside of British Columbia. Energy trade activities are carried out by Powerex, a wholly owned subsidiary of BC Hydro. Trade activities help BC Hydro balance its system by being able to import energy to meet domestic demand when there is a supply shortage in the system due to such factors as low water inflows. Exports are made only after ensuring domestic demand requirements can be met.

Trade revenues for the year ended March 31, 2009 increased by \$189 million over the previous year due to both electricity and gas activities. The increase in trade electricity sales includes a decrease in forward electricity transactions of \$266 million, which are netted with forward purchases in revenue in accordance with GAAP, offset by a \$154 million increase in spot electricity sales. Electricity revenues for the year reflect higher sales prices offset by a decrease in gross electricity sales volume of 13 per cent. Electricity sales prices increased as Powerex increased sales in the US Southwest and in Alberta during peak times while the decrease in sales volumes reflected diminishing spreads in US markets in the latter half of the year. Gas revenues increased by \$35 million reflecting an increase in gas sales prices of 8 per cent as well as a 27 per cent increase in gas sales volumes. The increase in gas sales prices was driven by increased supply concerns in the early part of the year while the increase in volumes reflected Powerex's strategy to grow its gas business.

### ENERGY COSTS

Energy costs are influenced primarily by the volume of energy consumed by customers, the mix of sources of supply and market prices of energy. The mix of sources of supply is influenced by variables such as the current and forecast market prices of energy, water inflows, reservoir levels, energy demand and environmental and social impacts.

Energy costs are comprised of the following sources of supply:

	<i>(in millions)</i>		<i>(gigawatt hours)</i>		<i>(\$ per MWh)</i>	
	2009	2008	2009	2008	2009	2008
Hydroelectric (water rental payments)	\$ 310	\$ 318	44,348	51,655	\$ 7.07	\$ 6.10
Purchases from Independent Power						
Producers and other long-term contracts	544	481	8,374	7,765	64.96	61.94
Other electricity purchases – Domestic	271	152	5,020	2,259	53.98	67.43
Gas for thermal generation	58	60	312	423	185.58	141.84
Transmission charges and other expenses	79	63	116	115	—	—
Allocation to/from trade energy	(26)	(126)	(65)	(2,412)	79.08	56.04
<b>Total Domestic</b>	<b>\$ 1,236</b>	<b>\$ 948</b>	<b>58,105</b>	<b>59,805</b>	<b>\$ 21.27</b>	<b>\$ 15.85</b>
Other electricity purchases – Trade – Gross	\$ 1,729	\$ 1,912	32,086	34,020	\$ 88.96	\$ 55.27
Less: forward electricity purchases	(1,125)	(1,391)	—	—	—	—
Other electricity purchases – Trade – Spot	604	521	—	—	—	—
Remarketed gas – Gross	1,127	828	18,797	14,939	59.96	55.43
Less: forward gas purchases	(885)	(603)	—	—	—	—
Other gas purchases – Trade – Spot	242	225	—	—	—	—
Transmission charges and other expenses	285	237	—	—	—	—
Allocation to/from domestic energy	26	126	65	2,412	79.08	56.04
<b>Total Trade</b>	<b>\$ 1,157</b>	<b>\$ 1,109</b>	<b>50,948</b>	<b>51,371</b>	<b>\$ 44.61</b>	<b>\$ 47.24</b>
<b>Total Energy Costs</b>	<b>\$ 2,393</b>	<b>\$ 2,057</b>	<b>109,053</b>	<b>111,176</b>	<b>\$ 32.17</b>	<b>\$ 30.35</b>

<sup>1</sup> Other electricity purchases in dollars include purchases for trade activities shown net of derivatives. Gigawatt hours and \$ per MWh are shown at gross cost.

<sup>2</sup> Total cost per MWh includes other electricity purchases at gross cost.

## FINANCIAL RESULTS

For the year ended March 31, 2009, total energy costs of \$2,393 million were \$336 million or 16.3 per cent higher than the previous year primarily as a result of lower hydro generation due to lower inflows and system constraints which required higher electricity purchases from Independent Power Producers (IPPs) and other long-term contracts, higher market electricity purchase volumes, higher gas trade volumes and prices, and higher electricity trade spot purchases.

### DOMESTIC ENERGY COSTS

Domestic energy costs for the year ended March 31, 2009 were \$288 million or 30 per cent higher than the previous year. The increase was due to higher purchases of energy as opposed to low-cost hydro generation. Higher purchase volumes from all sources were required due to lower than average inflows and system constraints such as the GM Shrum Generating Station unit outage, while contango pricing in the second half of fiscal 2009 motivated pre-purchasing of market electricity. In addition, prices from IPPs were higher than in the prior year.

### TRADE ENERGY COSTS

Trade energy costs for the year ended March 31, 2009 increased by \$48 million over the prior year primarily due to trade electricity and remarketed gas purchases. The increase in trade electricity purchases includes a decrease in forward electricity purchases of \$266 million, which are netted in revenue in accordance with GAAP, offset by an \$83 million increase in spot electricity purchases. Gross electricity purchases for the year reflect marginal decreases in average electricity purchase prices and in electricity purchase volumes. The increase in remarketed gas purchases of \$299 million was driven by a 26 per cent increase in gross gas purchase volumes and an 8 per cent increase in the average gross gas purchase price. As with gas sales, gas purchase volume increases reflect Powerex's strategy to grow its gas business while increased gas purchase prices were due to supply concerns in the early part of the year.

### WATER INFLOWS

Water inflows into BC Hydro's reservoirs were 96 per cent of average in fiscal 2009, compared to 114 per cent of average in fiscal 2008 [average is based on the 1971-2000 period]. This resulted in a decrease in the volume of low-cost hydro generation, one factor influencing the level of energy purchases. The decision to purchase energy instead of utilizing hydro generation is based on many factors, such as the forecast market price of energy in future periods relative to the current period, current reservoir levels and future demand requirements. Operating constraints related to legal and regulatory obligations such as minimum reservoir levels and stream flow requirements also affect the decision to import energy.

The BC Hydro reservoirs have been managed such that the combined storage in BC Hydro reservoirs at March 31, 2009 was 115 per cent of average, compared to 106 per cent of average at March 31, 2008 [average storage levels relate to the average from 1986-2008], with the Williston reservoir on the Peace River system at 106 per cent of average (fiscal 2008 - 114 per cent), and the Kinbasket reservoir on the Columbia River system at 147 per cent of average (fiscal 2008 - 79 per cent).

### OPERATING COSTS

Operations costs for the year ended March 31, 2009, were \$123 million lower than the previous year. The decrease from fiscal 2008 was primarily due to \$229 million in provisions made in fiscal 2008 for First Nations settlement costs, partially offset by higher Site C costs in fiscal 2009 as this project moved into its second phase, and higher demand-side management (DSM) costs which supports energy conservation. All of these costs are transferred to regulatory accounts and do not impact current year net income. Excluding the costs that were transferred to regulatory accounts, operations costs were \$28 million higher than the prior year, largely due to a \$19 million increase in provisions for California litigation matters and higher expenditures on engineering and supply chain management.

## FINANCIAL RESULTS

Maintenance costs for the year ended March 31, 2009, were \$61 million higher than the previous year. The increase was primarily the result of unexpected expenditures to address equipment failures of a unit at the GM Shrum Generating Station near the Peace River which occurred in the first quarter, increased maintenance of distribution assets, routine vegetation work to improve system resiliency for the storm season, expenditures for penstock coatings, increased civil maintenance and facility repairs in fiscal 2009. The GM Shrum turbine failure resulted in significant unplanned major maintenance and costs are therefore transferred to a new deferral account, the GM Shrum Unit 3 Outage regulatory account.

General and administrative costs were \$35 million higher than the previous year. The increase is primarily the result of expenditures for the Smart Metering and Infrastructure project (SMI), procurement enhancement initiative and information technology initiatives. Excluding the costs that were transferred to regulatory accounts, general and administrative costs were \$19 million higher than the prior year, largely due to information technology, strategic procurement and employee-related costs.

## AMORTIZATION EXPENSE

Amortization expense for the year ended March 31, 2009, was \$26 million higher than the previous year mainly due to the one time gain on the sale of a compressor that occurred in fiscal 2008 which was credited to and decreased amortization expense for the 2008 year, and increased assets in service. This increase was partially offset by gains from the sale of land in fiscal 2009, fewer project write-offs, and lower contributions in aid assets in service.

## FINANCE CHARGES

Finance charges for the year ended March 31, 2009, were \$9 million higher than the previous year. The increase is due to foreign exchange translation losses on net unhedged US dollar debt as a result of the weakening of the Canadian dollar as compared to the US dollar in the current year versus the strengthening of the Canadian dollar as compared to the US dollar in the prior year, a higher average volume of debt, and lower sinking fund income as the Canadian sinking funds were liquidated in June 2008. These negative variances were partially offset by lower short-term interest rates and higher capitalized interest related to higher capital expenditures.

## RETURN ON EQUITY AND PAYMENT TO THE PROVINCE

<i>(dollar amounts in millions)</i>	2009	2008
Actual return on equity <sup>1</sup>	11.75%	11.33%
Allowed return on equity <sup>2</sup>	11.78%	12.05%
Payment to the Province	—	\$ 288

<sup>1</sup> Based on equity as defined for regulatory purposes, which changed by Order in Council from the Province effective April 1, 2008.

<sup>2</sup> BC Hydro's allowed return on equity for F08 and F09 were set by the Commission via BCUC Orders G-143-06 dated November 10, 2006 and G-16-09 dated March 13, 2009 respectively. The allowed return on equity has been calculated to equal, on a pre-income tax basis, that of the most comparable investor-owned utility.

Under a Special Directive from the Province, BC Hydro is required to make an annual Payment to the Province (the Payment) on or before June 30 of each year. The Payment is equal to 85 per cent of BC Hydro's distributable surplus for the most recently completed fiscal year assuming that the debt to equity ratio, as defined by the Province, after deducting the Payment, is not greater than 80:20. If the Payment would result in a debt to equity ratio exceeding 80:20, then the Payment will be based on the greatest amount that can be paid without causing the debt to equity ratio to exceed 80:20. Due to the 80:20 cap, no Payment is payable for fiscal 2009.

## FINANCIAL RESULTS

The definition of equity to determine the debt to equity ratio for purposes of calculating the Payment, is determined through an Order in Council from the Province. On January 17, 2008, the Province changed the definition of equity to include only retained earnings and accumulated other comprehensive income. This change was effective for fiscal years beginning April 1, 2008. Prior to this change, equity was defined as the sum of retained earnings, deferred revenue, contributions arising from the Columbia River Treaty and contributions in aid of construction.

## LIQUIDITY AND CAPITAL RESOURCES

Cash flow provided by operating activities for the year ended March 31, 2009, was \$254 million, compared with \$836 million for the prior year. The primary reasons that cash flow provided by operating activities decreased in fiscal 2009 are higher purchased cost of energy and net increases in working capital.

The net long-term debt balance at March 31, 2009, was \$9,325 million, compared with \$7,541 million at March 31, 2008. The increase was mainly as a result of net long-term bond issues totaling \$258 million, an increase in revolving borrowings of \$695 million, an increase of \$66 million in debt due to fair value hedge accounting, net foreign exchange revaluation losses of \$273 million and withdrawals of \$509 million in sinking funds. The funds generated in the current year were used primarily to fund property, plant and equipment expenditures and the 2008 Payment to the Province.

The net short-term debt balance at March 31, 2009, was \$2,331 million, compared with \$1,090 million at March 31, 2008. The increase over the prior year was mainly due to an increase in revolving borrowings of \$695 million and an increase in the current portion of long-term debt due to mature in the next fiscal year (\$640 million) compared with the previous year (\$94 million).

## PROPERTY, PLANT AND EQUIPMENT EXPENDITURES

Property, plant and equipment expenditures were as follows:

<i>(in millions)</i>	2009	2008	Increase
Distribution improvements and expansion	\$ 399	\$ 357	\$ 42
Generation replacements and expansion	349	287	62
Transmission lines and substation replacements & expansion <sup>1</sup>	474	284	190
General, including computers and vehicles <sup>2</sup>	178	148	30
<b>Total Property, Plant and Equipment Expenditures<sup>3</sup></b>	<b>\$ 1,400</b>	<b>\$ 1,076</b>	<b>\$ 324</b>

<sup>1</sup> Fiscal 2008 restated for inventory reclassified to Property, Plant and Equipment per new accounting standard CICA Section 3031.

<sup>2</sup> Reclassification of Land Rights to General.

<sup>3</sup> Includes Intangible Assets.

For the year ended March 31, 2009, the increase in distribution improvements and expansion is primarily due to increased spending on reinforcement and substation expansion projects and increased system improvement work. The increase in generation replacements and expansion is mainly as a result of increased spending on the Revelstoke Unit 5 installation, the Ruskin Powerhouse and dam project, and the Cheakamus Spillway Gate Reliability project. These increases are partially offset by lower spending on the John Hart Spillway Gate Reliability project. The increase in transmission activity is mainly due to higher expenditures on the Vancouver Island Transmission Reinforcement project, the Interior to Lower Mainland project, the Mission and Matsqui project and various IPP projects. These increases are partially offset by lower expenditures on the Terasen TMPSE project, and the Gibraltar Mine Load Increase. The increase in general capital expenditures is primarily due to a greater number of information technology projects and vehicle purchases.

## FINANCIAL RESULTS

### DERIVATIVE FINANCIAL INSTRUMENT ASSETS AND LIABILITIES

All derivative financial instruments are required to be carried on the balance sheet at fair value. As at March 31, 2009, BC Hydro recorded a net derivative financial instrument asset of \$95 million (\$1,167 million asset less \$1,072 million liability) compared with a net financial instrument liability of \$81 million (\$729 million asset less \$810 million liability) in the prior year. The weakening of the Canadian dollar in the current year resulted in significant gains in foreign currency contracts as compared to the prior year.

### COMPARISON WITH SERVICE PLAN

The *Budget Transparency and Accountability Act* requires that BC Hydro file a Service Plan each February. BC Hydro's Service Plan filed in February 2008 forecast income before regulatory accounts for fiscal 2009 at \$247 million and net income forecast at \$358 million. BC Hydro prepared an updated forecast in January 2009 that forecast income before regulatory accounts of \$3 million and net income at \$357 million [See Future Outlook].

Actual loss before regulatory account transfers for the year ended March 31, 2009, was \$72 million, which was \$319 million lower than the February 2008 Service Plan forecast of income of \$247 million. This is primarily the result of lower than forecast domestic gross margin due to lower domestic revenues, particularly in the large industrial sector which was impacted by weakness in the forestry sector of the economy, and to higher costs for energy purchases due to lower than average water inflows and unexpected outages which reduced generation levels during the year.

Net trade margins were higher than the February 2008 Service Plan forecast largely due to favourable electricity price spreads between the Northwest and Southwest in the first half of the year as a result of freshet occurring later than normal and between the Northwest and Alberta in the second half of the year driven by generation outages in Alberta.

Operating costs increased by \$75 million from the February 2008 Service Plan due to an increase in the provision for California litigation matters, unexpected expenditures to address equipment failures of a unit at the GM Shrum Generating Station, higher Site C costs and expenditures on SMI, and higher routine and storm restoration costs incurred during the winter season. Amortization expense is \$5 million lower than the February 2008 Service Plan due to the gain on sale of assets and fewer assets in service than planned for the year.

The majority of these impacts to net income are transferred to regulatory accounts. As a result, the actual net income of \$366 million was \$8 million higher than the February 2008 Service Plan.



## FINANCIAL RESULTS

The table below provides an overview of BC Hydro's financial performance relative to its 2009 to 2011 Service Plan Update (February 2008). The results and forecasts form the basis upon which key performance targets are set.

	Actual			Service Plan Forecast	2009 Variance
(in millions)	2007	2008	2009	2009	
<b>Revenues</b>					
Total Domestic	\$ 2,786	\$ 2,944	\$ 2,814	\$ 3,136	\$ (322)
Trade	1,406	1,266	1,455	2,021	(566)
	4,192	4,210	4,269	5,157	(888)
<b>Expenses</b>					
Energy costs	2,117	2,057	2,393	3,007	614
Operating costs	716	942	915	840	(75)
Taxes	149	153	167	167	—
Amortization	378	368	394	399	5
	3,360	3,520	3,869	4,413	544
<b>Operating Income</b>	832	690	400	744	(344)
Finance Charges	453	463	472	497	25
<b>Income Before Regulatory Account Transfers</b>	379	227	(72)	247	(319)
Net Change in Regulatory Accounts	28	142	438	111	327
<b>Net Income</b>	\$ 407	\$ 369	\$ 366	\$ 358	\$ 8

## CHANGE IN ACCOUNTING POLICY AND ADOPTION OF NEW ACCOUNTING STANDARDS

### CHANGE IN ACCOUNTING POLICY

BC Hydro's subsidiary Powerex has elected to change its accounting policy for recording revenues and related costs for physical derivative natural gas transactions. Under the previous accounting policy, settlements of derivative financial instruments involving the sale or purchase of physical natural gas was reported on a gross basis in the income statement as sales and cost of energy, respectively. As these contracts are considered derivative financial instruments, Powerex has determined it is more representative to present the revenues and related costs on a net basis upon settlement.

Prior year balances have been revised to conform with the new policy, resulting in a decrease in trade revenue and trade energy costs of \$644 million. There was no impact on net income and therefore, no opening retained earnings.

### ACCOUNTING STANDARDS ADOPTED IN 2009

Effective April 1, 2008, BC Hydro adopted four new Canadian Institute of Chartered Accountants (CICA) accounting standards: (a) Section 1535, Capital Disclosures; (b) Section 3031, *Inventories*; and (c) Section 3862, *Financial Instruments - Disclosures* and Section 3863, *Financial Instruments - Presentation*. The main requirements of these new standards and the resulting financial statement impact are described below.

## FINANCIAL RESULTS

### (a) Capital Disclosures

CICA Section 1535 requires disclosure of: (i) an entity's objectives, policies and process for managing capital; (ii) quantitative data about what the entity considers as capital; and (iii) whether the entity has complied with any capital requirements and, if it has not complied, the consequences of such non-compliance. Refer to Note 6 in the consolidated financial statements for additional disclosures.

### (b) Inventories

CICA Section 3031 provides significantly more guidance on the measurement of inventories, with an expanded definition of cost and the requirement that inventory must be measured at the lower of cost and net realizable value. In addition the section has additional disclosure requirements, including accounting policies, carrying values, and the amount of any inventory write-downs. Refer to Note 4 in the consolidated financial statements for additional disclosures.

### (c) Financial Instruments – Disclosures and Financial Instruments – Presentation

CICA Section 3862, *Financial Instruments – Disclosures* and Section 3863, *Financial Instruments – Presentation* replace Handbook Section 3861, *Financial Instruments – Disclosure and Presentation*, revising and enhancing its disclosure requirements, and carrying forward unchanged its presentation requirements. These new sections place increased emphasis on disclosures about the nature and extent of risks arising from financial instruments and how the entity manages those risks. The incremental disclosures required as a result of adopting these Sections can be found in Note 13 in the consolidated financial statements. The transitional provisions provide that certain of the incremental disclosures need not be provided on a comparative basis in the year of adoption.

### (d) Credit Risk and the Fair Value of Financial Assets and Liabilities

In January 2009, the CICA Emerging Issues Committee ("EIC") issued EIC-173, *Credit Risk and the Fair Value of Financial Assets and Liabilities*. EIC-173 is effective for interim and annual financial statements ending on or after January 20, 2009. EIC-173 provides guidance that an entity's own credit risk and the credit risk of counterparties should be taken into account in determining the fair value of financial assets and liabilities. Adoption of this guidance is applied retrospectively without restatement of prior periods. For the year ended March 31, 2009, the revaluation of financial assets and liabilities resulted in a decrease in Net Income and Other Comprehensive Income of \$13 million and \$25 million, respectively. The adjustment to the April 1, 2008 opening balances for retrospective application of impacts prior to 2009 had no material effect on either opening Retained Earnings and Accumulated Other Comprehensive Income.

## FUTURE ACCOUNTING CHANGES

### (a) International Financial Reporting Standards

In February 2008, the Canadian Accounting Standards Board (AcSB) confirmed that the use of IFRS will be required in 2011 for publicly accountable enterprises. IFRS will replace Canada's current Generally Accepted Accounting Principles (GAAP) for those enterprises. These include profit-oriented enterprises that are responsible to large or diverse groups of stakeholders, including government business enterprises, which would include crown corporations such as BC Hydro. The official changeover date is for interim and annual financial statements relating to fiscal years beginning on or after January 1, 2011. The Company is currently evaluating the impact of the transition to IFRS on its consolidated financial statements.

### (b) Goodwill and Intangible Assets

Effective April 1, 2009, the Company will adopt new CICA Handbook Section 3064, *Goodwill and Intangible Assets*. This section replaces CICA Handbook Section 3062, *Goodwill and Intangible Assets*, and establishes revised standards for the recognition, measurement, presentation and disclosure of goodwill and intangible assets. It is anticipated that these changes will not have a material impact on the Company's consolidated financial statements.

## FINANCIAL RESULTS

### (c) Accounting for Rate-Regulated Operations

In August 2007, the AcSB considered the comments received on its March 2007 Exposure Draft, "Rate-Regulated Operations," and decided to: (i) remove the temporary exemption in Section 1100, *Generally Accepted Accounting Principles*, pertaining to the application of that Section to the recognition and measurement of assets and liabilities arising from rate regulation; (ii) not withdraw from the Handbook all other recognition and measurement guidance relating specifically to rate-regulated operations; and (iii) retain AcG-19, *Disclosures by Entities Subject to Rate Regulation*, but to make consequential amendments to the Guideline as a result of the above changes. The changes are applicable prospectively to BC Hydro's fiscal year beginning on April 1, 2009. It is anticipated that these changes will not have a material impact on the Company's regulatory accounting practices.

## STATUS OF TRANSITION TO INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

On February 13, 2008, the Canadian Accounting Standards Board confirmed the adoption of IFRS in place of Canadian GAAP for publicly accountable enterprises. The new requirements are effective for interim and annual reporting periods beginning on or after January 1, 2011. For BC Hydro, this will be effective for the fiscal year commencing on April 1, 2011.

To facilitate the conversion process, BC Hydro has appointed an external advisor and assembled a core project team. Project governance has been established with the formation of a Steering Committee and the identification of other key stakeholders within the organization who will support the overall conversion process. Regular reporting is provided to the Audit and Risk Management Committee of the Board of Directors.

Project planning commenced with a high level diagnostic review of significant differences between IFRS and Canadian GAAP. Areas with significant differences that will impact BC Hydro include: Regulatory Accounting, Property, Plant & Equipment, Provisions and Contingent Liabilities, Employee Benefits, and the overall presentation of financial statements. There are also a number of significant changes with the initial adoption of IFRS under IFRS 1, *First-time Adoption of International Financial Reporting Standards*.

Planning efforts have advanced on potential changes to Regulatory Accounting and related impacts to financial reporting for rate making purposes. Collaboration with the BCUC will be integral throughout this process. An industry work group of B.C. regulated utilities was also established during the year to identify common transition issues and potential regulatory strategies to address them.

Diagnostic and assessment activities have been substantially completed to date. The completion of topic specific workshops resulted in detailed assessments of potential impacts along with required changes to policies, processes and systems. An analysis of financial system impacts has been completed and specific reporting requirements have been incorporated into the planned conversion to a new financial system platform. Implementation activities will begin in earnest commencing in fiscal 2010.

## REGULATION

### REGULATORY ACCOUNTS

BC Hydro has established various regulatory accounts with the approval of the BCUC. Regulatory accounts allow BC Hydro to defer certain types of revenue and cost variances through transfers to and from the accounts which has the effect of adjusting net income. The deferred amounts are then included in customer rates in future periods, subject to approval by the BCUC.

For the year ended March 31, 2009, BC Hydro transferred, on a net basis, \$438 million of costs to regulatory accounts compared with

## FINANCIAL RESULTS

\$142 million during the previous year. The majority of the transfers relate to the cost of energy deferral to the Heritage Deferral Account (HDA) and demand-side management expenditures. The net balance of the regulatory asset and liability accounts as at March 31, 2009, was a \$1,016 million asset compared to a \$572 million asset at March 31, 2008. The significant increase in transfers to the cost of energy deferral accounts primarily reflects the higher than planned cost of energy in the current year compared with fiscal 2008 as a result of the requirement to purchase higher levels of energy in the market in order to meet domestic load requirements. The net balance in the deferral accounts (HDA, Non-Heritage Deferral Account (NHDA), Trade Income Deferral Account (TIDA) and BCTC Deferral Account (BCTCDA)) as at March 31, 2009, was a \$332 million asset compared to a \$48 million asset as at March 31, 2008. The energy deferral accounts are recovered through the rate rider.

The HDA and NHDA are referred to as the cost of energy deferral accounts because they are designed to defer the variance between the actual cost incurred by BC Hydro for energy supplied and the forecast energy cost in the most recent revenue requirements application. As a result of significant system energy constraints and lower inflows experienced in the current year (96 per cent of average), hydro generation was 4,802 GWh lower than forecast at the beginning of the fiscal year, resulting in higher market purchases required for domestic consumption. The average cost of hydro generation is \$7.07 per MWh compared to the average cost of \$53.98 per MWh for market purchases for the year ended March 31, 2009.

### REVENUE REQUIREMENTS APPLICATION

In regulating and setting rates for BC Hydro, the BCUC must ensure that the rates are sufficient to allow BC Hydro to provide reliable electricity service, meet its financial obligations, comply with government policy and achieve an annual rate of return on equity based on forecast consolidated net income. The annual rate of return on equity is equal to the pre-income tax annual rate of return allowed by the BCUC to the most comparable investor-owned energy utility regulated under the *Utilities Commission Act*. The allowed annual rate of return on equity calculated based on equity as defined for regulatory purposes for fiscal 2009 was 11.78 per cent (2008 – 12.05 per cent). The actual rate of return in fiscal 2009 was 11.75 per cent. The allowed annual rate of return for fiscal 2010 is estimated at 13.05 per cent.

BC Hydro filed its F2009/2010 Revenue Requirements Application (RRA), with the BCUC on February 20, 2008 and the BCUC issued its decision on March 13, 2009, approving rate increases of 2.34 per cent as of April 1, 2008 and 8.74 per cent as of April 1, 2009. Rate riders of 0.5 per cent for fiscal 2009 and 1 per cent for fiscal 2010 to recover the balances in the deferral accounts were also approved. The approved rate increase of 2.34 per cent is lower than the interim rate increase of 6.56 per cent. BCUC has directed BC Hydro to refund the difference to its customers, including interest. Recovery of deferral account balances as approved by the BCUC from the approved rate rider in fiscal 2009 was \$14 million.

In addition to the decision on rates, the BCUC also directed that several new regulatory accounts be created for the purpose of deferring certain revenue and cost variances and adjusting net income. Commencing in fiscal 2009, the new regulatory accounts include the GMS3 Regulatory Account to provide for the deferral of costs for the GM Shrum Unit 3 outage and regulatory accounts to capture variances between actual and planned expenditures for finance charges, taxes, amortization of capital additions, storm costs and net employment costs included in operating costs. Commencing in fiscal 2010, two additional new regulatory accounts will be added. One is to capture variances between actual and planned non-current pension costs, and the other is to defer in the Return on Equity Adjustment Regulatory Account the impact of the amendment to Heritage Special Direction No. HC2 of February 17, 2009 which added 1.63 per cent to BC Hydro's allowed annual rate of return on equity for fiscal years 2010, 2011 and 2012.

## FINANCIAL RESULTS

### RATE DESIGN

BC Hydro filed a Residential Inclining Block Rate (RIB) application on February 26, 2008. It proposed a two-step rate structure for residential customers, with the Step-2 rate price for all energy consumption over a certain kWh amount per bi-monthly billing period. The BCUC approved the two-step RIB rate effective October 1, 2008, setting the Step 1 threshold at 1,350 kWh and capping the Step 2 rate at BC Hydro's long-run cost of supply.

The Step 2 rate is intended to better reflect the long-run cost of new energy supply and to provide an effective price signal to encourage energy conservation and efficiency. While the rate is designed to be revenue neutral to the residential rate class, individual customers will see bill impacts, which can be mitigated through consumption behaviour changes and participation in BC Hydro's Power Smart programs.

### LONG-TERM ACQUISITION PLAN

On June 12, 2008, BC Hydro filed the 2008 Long-Term Acquisition Plan (LTAP) Application with the BCUC. The 2008 LTAP is an update to the 2006 Integrated Electricity Plan/LTAP and outlines actions to be taken over the next 10 years to build on work started to meet the 2007 British Columbia Energy Plan's objectives and ensure that BC Hydro continues to provide reliable, cost-effective long-term service to its customers. A public hearing took place in February 2009, and a decision by the BCUC is expected in the summer of 2009.

### STANDING OFFER PROGRAM

The Standing Offer Program (SOP) establishes a standing offer for power produced from clean electricity projects up to 10 megawatts, and is in accordance with the policy action in the Provincial Government's 2007 Energy Plan. A negotiated settlement on the terms and conditions of this program was reached with BC Hydro's customer groups and stakeholders and approved by the BCUC in March 2008. During fiscal 2009, BC Hydro received and applied the SOP rules to nine applications and signed one SOP Electricity Purchase Agreement.

### BIO-ENERGY CALL (PHASE 1)

BC Hydro issued its Phase 1 Request for Proposals in late fiscal 2008. After an extensive review process of the 20 proposals received, four Electricity Purchase Agreements (EPAs) were awarded in December 2008 for 579 GWh/year of firm energy and 60 MW of dependable capacity. The awards are consistent with a number of policy actions directed by government in the 2007 Energy Plan. These EPAs were filed with the BCUC on February 17, 2009 and are currently being reviewed.

### HOME PURCHASE OFFER PROGRAM

BC Hydro is carrying out a Home Purchase Offer Program (HPOP) for owners of certain residential properties located on BC Hydro's transmission right of way corridor located between Tsawwassen Substation and English Bluff Terminal Station. Purchase agreements for 104 properties totaling approximately \$62 million have been finalized and purchases are planned to be concluded by the end of September 2009. HPOP net costs will be recorded in a regulatory account per Direction No. 1 to the BCUC dated March 12, 2009 and will be recovered in future rates.



## FINANCIAL RESULTS

### LEGAL PROCEEDINGS

Since 2000, Powerex has been named, along with other energy providers, in lawsuits and U.S. federal regulatory proceedings which seek damages and/or contract rescissions based on allegations that, during part of 2000 and 2001, the California wholesale electricity markets were unlawfully manipulated and energy prices were not just and reasonable. Powerex has obtained dismissals of all but one of the lawsuits. In the remaining lawsuit, the California Department of Water Resources (CDWR) has claimed that it was forced under duress to enter into numerous transactions with Powerex in 2001. The trial in the CDWR litigation is scheduled to begin on May 18, 2010 in federal court. If CDWR is successful at trial the case will then go to the Federal Energy Regulatory Commission (FERC) to determine appropriate remedies.

FERC has approved a settlement agreement between FERC staff and Powerex that acknowledged that there was no evidence that Powerex engaged in any gaming or other improper practices with any other market participants, and further noted that Powerex was a valuable and reliable supplier to the California market throughout the energy crisis. FERC's approval of this settlement is currently being challenged by various California parties. If the challenges are unsuccessful, FERC's determination that Powerex did not engage in market manipulation will stand and could provide Powerex with additional defences in the remaining litigation and other FERC proceedings.

FERC decided earlier in the proceedings that certain market-wide refunds will have to be paid by energy providers to various California parties. The precise amount has not been determined and the timing of the refunds is unknown. In addition, FERC has been ordered by the Ninth Circuit to reconsider additional refunds based on allegations of seller market manipulation and on quarterly reporting deficiencies. CDWR transactions will be included in these latter inquiries.

At March 31, 2009, Powerex was owed US \$263 million (CDN \$332 million) by the California Power Exchange (Cal Px) and the California Independent System Operator (CAISO) related to Powerex's electricity trade activities in California during the period covered by the lawsuits. As a result of defaults by a number of California utilities, the Cal Px and CAISO were unable to pay these amounts to Powerex. It is expected those receivables will be offset against any refunds that Powerex is required to pay.

Due to the ongoing nature of the regulatory and legal proceedings against Powerex, management cannot predict the outcomes of the claims against Powerex. Powerex has recorded provisions for uncollectible amounts and legal costs associated with the California energy crisis. These provisions are based on management's best estimates, and are intended to adequately provide for any exposure. However, the amounts that are ultimately collected or paid may differ from management's current estimates. Management has not disclosed the provision amounts or ranges of expected outcomes due to the potentially adverse effect on the process. Due to the size, complexity and nature of BC Hydro's operations, various other legal matters are pending. It is not possible at this time to predict with any certainty the outcome of such litigation. Management believes that any settlements related to these matters will not have a material effect on BC Hydro's consolidated financial position or results of operations.

### RISK MANAGEMENT

BC Hydro's operations involve a broad spectrum of risks ranging from those commonly associated with any business to catastrophic societal loss risks that would have severe effects on entire regions. The key risks BC Hydro faces are divided into six categories for management purposes: employee, public and dam safety; reliability; financial performance; regulatory; organization risk; and environmental.

## FINANCIAL RESULTS

### EMPLOYEE, PUBLIC AND DAM SAFETY

Safety risks to the public exist due to the multiple uses of water for electricity generation, recreation and waterways. Risks can also result from potential contact with transmission and distribution equipment located in communities. To manage the public safety risk, BC Hydro relies on design, construction and operating standards and practices, signage, consultation with other agencies and stakeholder groups, and public education. BC Hydro also prepares emergency response plans to limit injury and loss of life and to restore electric service.

Many of BC Hydro's employees face the risk of serious injury or death by the nature of their jobs in dealing with electrical and other high risk hazards. To mitigate these inherent risks, BC Hydro has a comprehensive safety management system that includes employee involvement, communication, training, resources, policies and safety practice regulations.

The large dams represent a catastrophic loss risk (low probability but high consequence) to BC Hydro in terms of life, safety, financial, environmental and reputation. This dam failure risk is managed through a comprehensive dam safety management system involving dam safety professionals and experts. The system incorporates dam surveillance and monitoring, periodic independent reviews of dam performance, dam investigations and analysis. Dam upgrades may be required due to changes in knowledge, standards or extreme event parameters (for earthquake, floods, landslides). BC Hydro follows the B.C. Dam Safety Regulation, participates in the Canadian Dam Association and the International Commission on Large Dams, and engages panels of international experts for independent advice on the management and control of these risks.

### RELIABILITY

The most significant risk to the reliability of BC Hydro's system is the impact of weather. With BC Hydro's large service territory, there is significant exposure to trees, terrain and diverse weather patterns. BC Hydro mitigates the likelihood and consequence of such impacts through effective design, construction, operations, maintenance and response. Additionally, a five-year System Resiliency Program is in progress which increases the ability of the system to withstand interruptions caused by adverse weather. In managing these risks, BC Hydro balances customers' expectations and cost considerations. Reliability risks could also result from either a lack of available generation supply or the associated transmission capacity to meet customer demand. BC Hydro manages these risks through long-term planning, asset maintenance programs, reliance on a diverse supply of energy options, and through cooperative support arrangements with neighbouring utilities.

BC Hydro must meet government permitting requirements to operate its facilities and build new infrastructure, which can have an impact on project lead times. Delays in obtaining appropriate permits and consent could adversely impact reliability.

### FINANCIAL PERFORMANCE

In meeting its financial performance targets, BC Hydro faces many risks including energy costs, energy demand, interest and foreign exchange rates, pension obligations, and energy trading. Of these, risks associated with energy costs – specifically water inflows and energy market prices – are the largest. BC Hydro is permitted to earn an allowed return on equity. Tariff rates are set based upon BC Hydro's cost and equity forecast. Many risks (difference between forecast and actual costs) associated with uncontrollable costs are mitigated through regulatory deferral accounts. The major cost components susceptible to variation included in the regulatory deferral accounts are water inflows, energy prices including thermal fuel costs, and trade income.

## FINANCIAL RESULTS

Increasing costs due to aging infrastructure, the need for new supply and the need to manage environmental impacts create challenges for BC Hydro in maintaining the low electricity cost advantage the province enjoys. How BC Hydro manages tradeoffs between these competing objectives will be important to its financial performance and its ability to make the required infrastructure investment. External long-term costs of environmental and social impacts need to be factored into decision-making today to ensure the right business decisions are made for the long-term.

Based on recent financial market volatility, market returns on the pension plan assets are expected to be significantly lower than originally forecast. The return on pension fund assets has a significant impact on employee future benefit costs. The total impact on costs has not been determined but could be significant for fiscal 2010.

### CREDIT RISK

The recent volatile economic and market conditions could further impact customer loads and the creditworthiness of customers and suppliers and could limit energy trading opportunities.

### ENERGY COST

Energy cost risk is the most significant financial risk to BC Hydro. It arises when BC Hydro is required to purchase electricity from the markets due to increased electricity demand in B.C. or lower-than-expected water inflow levels. It can also result from changing market prices for electricity and natural gas. Overall BC Hydro system inflows during fiscal 2009 were slightly below average, primarily in the Columbia River system. As a result, in 2009 BC Hydro was a net buyer of market electricity for the eighth year in the last nine years.

The outlook for fiscal 2010 is for another below-average system inflow year, and BC Hydro again expects to be a net buyer of market electricity. BC Hydro manages energy cost risk through its flexible hydroelectric system, which allows water to be stored in large reservoirs and used when it is most economic, and by hedging the cost of imported electricity. This risk is also mitigated through regulatory deferral accounts which allow BC Hydro to recover its energy costs in rates provided they have been prudently incurred.

### ENERGY DEMAND

Electricity demand is increasing as B.C.'s population increases and its economy grows. However, this demand can be volatile, particularly from larger customers whose consumption is often driven by export markets and world commodity prices. BC Hydro's risk mitigation strategy is to achieve energy security from domestic sources. BC Hydro's first and best choice for energy security is through energy conservation and efficiency. Additional choices include reinvesting in assets to prolong their life, and where possible, adding additional energy and capacity. BC Hydro is also examining the potential of new hydro generation facilities and will continue to purchase clean and renewable power from IPPs.

### INTEREST RATES AND FOREIGN EXCHANGE RATES

Changes in interest and foreign exchange rates can significantly impact BC Hydro's finance charges. BC Hydro debt-management strategies include limiting the allowable percentage range of variable interest rate debt, and closely monitoring settlement and counterparty credit risks associated with derivative financial instruments. Interest and foreign exchange rate changes can also influence the performance and cost of BC Hydro's employee benefit and pension plans.

## FINANCIAL RESULTS

At March 31, 2009, \$2,881 million or 32.5 per cent of net debt, as defined by BC Hydro's Liability Risk Management Policy, was subject to interest rate reset within the next fiscal year. Interest rate risk is managed within Board approved limits and policies, which require the debt portfolio to be managed using an appropriate blend of fixed and floating rate debt, as well as by managing the term to maturity of its debt portfolio to manage exposure to interest rate movements in the future. BC Hydro utilizes financial instruments, including interest rate swaps and options, to adjust the balance of fixed and floating rate debt, and to reduce its overall cost of borrowing.

Falling interest rates resulting from the global financial turmoil have allowed BC Hydro to take advantage of the low rates for long-term debt to increase our proportion of long-term fixed rate debt and reduce our floating interest rate exposure.

BC Hydro is exposed to exchange rate risk through the purchase of U.S. dollar priced electricity and natural gas, from Powerex through its U.S. trade activities, from U.S. dollar capital equipment purchases and from U.S. dollar debt servicing. Foreign exchange risk is managed within Board approved limits and policies. Both foreign exchange and interest rate risks are monitored and reported on a monthly basis.

Commencing in fiscal 2009, variances between actual and planned finance charges, exclusive of Powerex, are deferred to a new regulatory account and therefore do not impact current year net income.

## ENERGY TRADING

BC Hydro's energy trading subsidiary, Powerex, is exposed to the risk of variable market prices and counterparties who might not meet their obligations. Powerex manages these risks by operating through defined limits that are regularly reviewed by both the Powerex and BC Hydro Boards of Directors. Powerex primarily focuses on near-mid-term trading positions, backing forward commitments with the physical supply capability of the BC Hydro System, the Canadian Entitlement, and other supply contracts, while operating within Board approved market and credit limits. Longer-term positions are reviewed in the context of the overall energy trading portfolio.

Powerex is exposed to the risk of litigation, such as the potential liabilities from the California power crisis. The conduct of Powerex employees is governed by its Trading Code of Conduct and Compliance policies and procedures. Powerex also adheres to the Electric Power Supply Association's Code of Ethics and Sound Trading Practices for Electric Power Suppliers to guide its trading activities.

## REGULATORY RISK

BC Hydro's proposals on revenue requirements, rate designs, long term planning, power procurement, and major capital projects are subject to review and approval or acceptance by BCUC. Depending on the outcome of these reviews, BC Hydro may not be able to undertake some of these initiatives or certain costs incurred by BC Hydro may not be recoverable in rates. Adding to this prevalence of regulatory uncertainty is the impact of the current economic downturn on BC Hydro's revenues and costs. The BCUC recently established a number of regulatory accounts to deal with this near-term economic uncertainty and lessen the financial risk to BC Hydro.

BC Hydro manages this regulatory risk by working to maintain positive relationships with its intervenors, stakeholders and the BCUC and ensures that its proposals and applications are well-justified and in the interests of its ratepayers.

## FINANCIAL RESULTS

### ORGANIZATIONAL RISK

Ensuring the appropriate supply of labour in both the short and long-term is a challenging issue for BC Hydro as well as for other utilities and businesses across North America. While the current global economic slowdown has eased some of the pressures within the external labour market and improved the attraction and retention of our workforce, certain occupation groups such as technical workers, operational managers and qualified trades people remain in limited supply across the local and broader employment marketplace. The cost of living in many British Columbia communities continues to pose a challenge to the attraction and retention of employees as does the geographic isolation of some BC Hydro work locations. A moderately reduced attrition rate has also kept BC Hydro's retirement eligibility rate high with around 25 per cent of our current staff eligible to retire within the next 5 years. Failing to maintain and develop BC Hydro's people capacity presents risk to the ability to execute our operational and capital plans.

### ENVIRONMENTAL AND SOCIAL PERFORMANCE

BC Hydro's environmental responsibility policy states that BC Hydro will meet or exceed environmental regulations defined by legislation, regulation, government directives and guidelines, as well as its commitments and agreements. Even if there is no environmental or social regulation, BC Hydro can face risks. These risks are managed through voluntary activities, such as the Water Use Plans. Voluntary action is taken with a view to managing long-term risk and for cost controls.

Areas where BC Hydro is exposed to the risk of non-compliance with environmental regulations include the release of hazardous materials into the environment, endangerment of wildlife and their habitats, or damage to heritage sites where there is evidence of historic human occupation. These risks are managed through environmental management systems and risk mitigation strategies.

BC Hydro's Board approved a corporate social responsibility policy in May 2004. The organization has built practices in this area to manage emerging risks associated with suppliers, employees, stakeholders and First Nations.

First Nations past grievances, land claims, service reliability and regulatory processes pose risks to BC Hydro. These risks are managed through a comprehensive Aboriginal Relations program. The long-term goal of further building business relationships with First Nations is intended to go beyond addressing the impact of BC Hydro facilities on First Nations and reducing the associated financial, legal and operating risks, to having a more proactive, mutually beneficial approach to working together.

### FUTURE OUTLOOK

The *Budget Transparency and Accountability Act* requires that BC Hydro file a Service Plan each February. BC Hydro's Service Plan filed in February 2009 forecasts income before regulatory accounts for fiscal 2010 at \$314 million and net income at \$452 million. BC Hydro received a decision from the BCUC on its F2009/2010 Revenue Requirements Application on March 13, 2009. The impact of the decision on BC Hydro's fiscal 2010 forecast was to update its forecast income from the Service Plan to forecast income before regulatory accounts of \$287 million and forecast net income of \$457 million. A summary of the changes relating to the BCUC decision is described in the Regulation section.

BC Hydro's earnings can fluctuate significantly due to various non-controllable factors such as the level of water inflows, customer load, market prices for electricity and natural gas, weather, temperatures, interest rates and foreign exchange rates. The Service Plan and updated forecast for fiscal 2010 assume average water inflows, customer load of 52,855 GWh, average market electricity prices of CDN \$54.70/MWh, short-term interest rates of 2.30 per cent and a US dollar exchange rate of US \$0.9103.



## FINANCIAL RESULTS

### EARNINGS SENSITIVITY

The following table shows the effect on earnings of changes in some key variables. The analysis is based on business conditions and production volumes forecast for fiscal 2010. Each separate item in the sensitivity analysis assumes the others are held constant. While these sensitivities are applicable to the period and magnitude of changes on which they are based, they may not be applicable in other periods, under other economic circumstances or greater magnitude of changes. All of these variances are subject to regulatory accounting treatment in fiscal 2010.

Factor	Change	Approximate change in earnings before regulatory deferral account transfers		
		(in millions)	5 year high	5 year low
Hydro generation <sup>1</sup>	1,000 GWh	\$ 55	52,140 GWh	41,601 GWh
Electricity trade margins	\$1/MWh	40	n/a	n/a
Interest rates	+/- 1%	30	4.50% <sup>2</sup>	2.39% <sup>2</sup>
Exchange rates (US/ CDN)	\$0.01	5	\$0.97 <sup>3</sup>	\$0.78 <sup>3</sup>
Weather	1°C change in average temperature	5	0.4°C <sup>4</sup>	-1.5 °C <sup>4</sup>
Pension costs	1% change in the expected return of 7.5% on pension assets <sup>5</sup>	5	15.0%	-23.0%

<sup>1</sup> Assumes change in hydro generation is offset by corresponding change in energy imports (i.e. increase in hydro generation is offset by decrease in energy imports).

<sup>2</sup> Interest rates are the average Canadian short-term interest rates (3 month Canadian Dollar Offered Rate).

<sup>3</sup> Exchange rates are the average US Dollar noon rates for fiscal 2005 to fiscal 2009.

<sup>4</sup> Weather high and low numbers represents the variance in degrees Celsius from the normal temperatures over the winter months November to March from 2004/05 to 2008/09. [-1.5 degrees lower than normal to 0.4 degrees higher than normal - normal is the 10-year rolling average].

<sup>5</sup> The impact of this change affects earnings in the subsequent year.

# CONSOLIDATED FINANCIAL STATEMENTS 2009

## MANAGEMENT REPORT

The consolidated financial statements of British Columbia Hydro and Power Authority (BC Hydro) are the responsibility of management and have been prepared in accordance with Canadian generally accepted accounting principles. The preparation of financial statements necessarily involves the use of estimates which have been made using careful judgment. In management's opinion, the consolidated financial statements have been properly prepared within the framework of the accounting policies summarized in the consolidated financial statements and incorporate, within reasonable limits of materiality, all information available at May 12, 2009. The consolidated financial statements have also been reviewed by the Audit & Risk Management Committee and approved by the Board of Directors. Financial information presented elsewhere in this Annual Report is consistent with that in the consolidated financial statements.

Management maintains systems of internal controls designed to provide reasonable assurance that assets are safeguarded and that reliable financial information is available on a timely basis. These systems include formal written policies and procedures, careful selection and training of qualified personnel and appropriate delegation of authority and segregation of responsibilities within the organization. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and the Audit & Risk Management Committee.

The consolidated financial statements have been examined by independent external auditors. The external auditors' responsibility is to express their opinion on whether the consolidated financial statements, in all material respects, fairly present BC Hydro's financial position, results of operations and cash flows in accordance with Canadian generally accepted accounting principles. The Auditors' Report, which follows, outlines the scope of their examination and their opinion.

The Board of Directors, through the Audit & Risk Management Committee, is responsible for ensuring that management fulfills its responsibility for financial reporting and internal controls. The Audit & Risk Management Committee, comprised of directors who are not employees, meets regularly with the external auditors, the internal auditors and management to satisfy itself that each group has properly discharged its responsibility to review the financial statements before recommending approval by the Board of Directors. The Audit & Risk Management Committee also recommends the appointment of external auditors to the Board of Directors. The internal and external auditors have full and open access to the Audit & Risk Management Committee, with and without the presence of management.



R.G. (Bob) Elton

President and Chief Executive Officer



Charles Reid

Executive VP Finance & Chief Financial Officer

Vancouver, Canada

May 12, 2009

# AUDITORS' REPORT

The Lieutenant Governor in Council, Province of British Columbia:

We have audited the consolidated balance sheet of British Columbia Hydro and Power Authority as at March 31, 2009 and the consolidated statements of operations, comprehensive income, retained earnings and cash flows for the year then ended. These financial statements are the responsibility of British Columbia Hydro and Power Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of British Columbia Hydro and Power Authority as at March 31, 2009 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

The consolidated financial statements as at and for the year ended March 31, 2008, prior to the adjustments relating to the change in accounting policy for derivative commodity trading gains and losses described in Note 2 and the correction of presentation errors in derivative commodity assets and liabilities as described in Note 21 to the financial statements, were audited by another firm of chartered accountants who expressed an opinion without reservation on those statements in their audit report dated May 9, 2008. We have audited the adjustments to the 2008 financial statements as described in Notes 2 and 21 to the consolidated financial statements and, in our opinion, such adjustments, in all material respects, are appropriate and have been properly applied.

*KPMG LLP*

Chartered Accountants

Vancouver, Canada

May 12, 2009

# CONSOLIDATED STATEMENT OF OPERATIONS

(Revised Note 2)

for the years ended March 31 (in millions)	2009	2008
<b>Revenues</b>		
Domestic	\$ 2,814	\$ 2,944
Trade	1,455	1,266
	4,269	4,210
<b>Expenses</b>		
Energy Costs:		
Domestic	1,236	948
Trade	1,157	1,109
Operations	394	517
Maintenance	366	305
Administration	155	120
Taxes	167	153
Amortization (Note 7)	394	368
	3,869	3,520
<b>Operating Income</b>	400	690
Financial Charges (Note 8)	472	463
<b>(Loss) Income Before Regulatory Account Transfers</b>	(72)	227
<b>Net Change in Regulatory Accounts (Note 5)</b>	438	142
<b>Net Income</b>	\$ 366	\$ 369

See accompanying notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the years ended March 31 (in millions)	2009	2008
<b>Net Income</b>	\$ 366	\$ 369
<b>Other Comprehensive (Loss) Income (Note 17)</b>	(98)	76
<b>Comprehensive Income</b>	\$ 268	\$ 445

See accompanying notes to consolidated financial statements.

## CONSOLIDATED STATEMENT OF RETAINED EARNINGS

for the years ended March 31 (in millions)	2009	2008
<b>Retained Earnings, Beginning of Year</b>	\$ 1,865	\$ 1,784
<b>Net Income</b>	366	369
<b>Accrued Payment to the Province</b>	—	(288)
<b>Retained Earnings, End of Year</b>	\$ 2,231	\$ 1,865

See accompanying notes to consolidated financial statements.

# CONSOLIDATED BALANCE SHEET

as at March 31 (in millions)	(Restated Note 21)	
	2009	2008
<b>ASSETS</b>		
<b>Property, Plant and Equipment, Net (Note 9)</b>	<b>\$ 11,745</b>	<b>\$ 10,743</b>
<b>Current Assets</b>		
Cash and cash equivalents	190	22
Current portion of sinking funds (Note 11)	2	506
Accounts receivable and accrued revenue	713	537
Inventories (Note 4)	178	83
Prepaid expenses	170	99
Current portion of derivative financial instrument assets	836	559
	2,089	1,806
<b>Other Assets and Deferred Charges</b>		
Intangible assets (Note 10)	395	411
Sinking funds (Note 11)	113	89
Employee future benefits (Note 16)	337	295
Regulatory assets (Note 5)	1,358	933
Derivative financial instrument assets	331	170
	2,534	1,898
	<b>\$ 16,368</b>	<b>\$ 14,447</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Long-Term Debt (Note 12)</b>		
Long-term debt net of sinking funds	\$ 6,996	\$ 6,957
Sinking funds presented as assets	113	89
	7,109	7,046
<b>Current Liabilities</b>		
Current portion of long-term debt, net of current sinking funds	2,329	584
Current portion of sinking funds presented as assets	2	506
Current portion of long-term debt (Note 12)	2,331	1,090
Accounts payable and accrued liabilities	1,272	1,266
Current portion of derivative financial instrument liabilities	877	561
	4,480	2,917
<b>Other Liabilities</b>		
Regulatory liabilities (Note 5)	342	361
Deferred contributions (Note 14)	1,046	982
Derivative financial instrument liabilities, long-term	195	249
Other long-term liabilities (Note 15)	1,007	971
	2,590	2,563
<b>Shareholder's Equity</b>		
Retained earnings	2,231	1,865
Accumulated other comprehensive income (Note 17)	(42)	56
	2,189	1,921
	<b>\$ 16,368</b>	<b>\$ 14,447</b>

## Commitments and Contingencies (Note 18)

See accompanying notes to consolidated financial statements.

## Approved on Behalf of the Board:



Mossadiq S. Umedaly  
Chairman



Tracey L. McVicar  
Chair, Audit & Risk Management Committee



# CONSOLIDATED STATEMENT OF CASH FLOWS

for the years ended March 31 (in millions)

	2009	2008
<b>Operating Activities</b>		
Net income	\$ 366	\$ 369
Regulatory account transfers	(488)	3
Adjustments for non-cash items:		
Amortization of regulatory accounts (Note 5)	59	84
Amortization expense	394	368
Foreign exchange translation (gains) losses	33	(17)
Unrealized (gains) losses on mark-to-market	(18)	27
Other items	(22)	(11)
	324	823
Changes in non-cash working capital:		
Accounts receivable and accrued revenue	(31)	(24)
Accounts payable and accrued interest	128	26
Prepaid expenses	(72)	12
Inventories	(95)	(1)
	(70)	13
<b>Cash provided by operating activities</b>	<b>254</b>	<b>836</b>
<b>Investing Activities</b>		
Property, plant and equipment and intangible asset expenditures	(1,384)	(1,068)
Deferred contributions	97	100
Other items	(17)	(17)
<b>Cash used in investing activities</b>	<b>(1,304)</b>	<b>(985)</b>
<b>Financing Activities</b>		
Bonds		
Issued	352	830
Retired	(94)	(542)
Revolving borrowings	687	159
Sinking fund withdrawals	509	143
Debt issue and related costs	(2)	—
Payment to the Province	(288)	(331)
Settlement of derivative instruments	54	(96)
<b>Cash provided by financing activities</b>	<b>1,218</b>	<b>163</b>
<b>Increase in cash and cash equivalents</b>	<b>168</b>	<b>14</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>22</b>	<b>8</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 190</b>	<b>\$ 22</b>
<b>Supplemental Disclosure of Cash Flow Information</b>		
Interest paid	\$ 492	\$ 512

See accompanying notes to consolidated financial statements.

## NOTE 1: SIGNIFICANT ACCOUNTING POLICIES

### PURPOSE

British Columbia Hydro and Power Authority [BC Hydro] was established in 1962 as a Crown Corporation of the Province of British Columbia [the Province] by enactment of the *Hydro and Power Authority Act*. As directed by the *Hydro and Power Authority Act*, BC Hydro's mandate is to generate, manufacture, distribute and supply power. BC Hydro's corporate purpose is to provide "Reliable power, at low cost, for generations." BC Hydro is subject to regulation (see Note 5) by the British Columbia Utilities Commission [BCUC] which, among other things, approves the rates BC Hydro charges for its services.

BC Hydro owns and operates electric generation and distribution facilities in the province of British Columbia. BC Hydro also owns transmission facilities in the province of British Columbia that are operated by British Columbia Transmission Corporation [BCTC], an independent Crown Corporation of the Province.

### BASIS OF PRESENTATION

These consolidated financial statements have been prepared in accordance with Canadian generally accepted accounting principles [GAAP]. The consolidated financial statements include the accounts of BC Hydro and its principal wholly-owned operating subsidiaries Powerex Corp. [Powerex], Powertech Labs Inc., BCH Services Asset Corp., and Columbia Hydro Constructors Ltd., collectively with BC Hydro [the Company]. All intercompany transactions and balances are eliminated upon consolidation.

### USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets, liabilities and commitments at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Significant items subject to management estimates and assumptions include the determination of the allowance for doubtful accounts, the fair value of sinking funds and derivative financial instruments, the actuarial assumptions used to value the employee future benefit plans, the useful lives of property, plant and equipment and intangible assets, amounts for accrued liabilities and contingencies, and the accrual for unbilled revenue at period end. Actual results could differ from these estimates.

### REGULATORY ACCOUNTING

BC Hydro is regulated by the BCUC and both entities are subject to general or special directives and directions issued by the Province. BC Hydro operates primarily under a cost of service regulation as prescribed by the BCUC. Orders in Council from the Province establish the basis for determining BC Hydro's equity for regulatory purposes, as well as its allowed return on equity and the annual Payment to the Province. Calculation of its revenue requirements and rates charged to customers are established through applications filed with and approved by the BCUC.

BC Hydro applies various accounting policies that differ from GAAP for enterprises that do not operate in a rate-regulated environment (see Note 5). Generally, these policies result in deferral and amortization of costs and recoveries to allow for adjustment of future rates. In the absence of rate-regulation, these amounts would otherwise be included in the determination of net income in the year the amounts are incurred. These accounting policies support BC Hydro's regulation and have been established through ongoing application to, and approval by, the BCUC. When a deferral account has been or will be applied for, and, in management's estimate, acceptance of deferral treatment by the BCUC is considered probable, BC Hydro defers such costs in advance of a final decision of the BCUC. If the BCUC subsequently denies the application for regulatory treatment, the remaining deferred amount is recognized in net income.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

## REVENUES AND ENERGY COSTS

Domestic revenues comprise sales to customers within the Province of British Columbia, and sales of firm energy outside the province under long-term contracts that are reflected in BC Hydro's domestic load requirements. Other sales outside the province are classified as trade.

Energy trading contracts that meet the definition of a financial or non-financial derivative are accounted for on a fair value basis whereby any realized gains and losses and unrealized changes in the fair value are recognized in trade revenues in the period the change occurred.

Energy trading and other contracts which do not meet the definition of a derivative are accounted for on an accrual basis whereby the realized gains and losses are recognized as revenue as the contracts are settled. Such contracts are considered to be settled when, for the sale of products, the significant risks and rewards of ownership transfer to the buyer, and for the sale of services, those services are rendered.

Revenue is recognized on the basis of billing cycles and also includes accruals for electricity deliveries not yet billed.

## FOREIGN CURRENCY TRANSLATION

Foreign currency denominated revenues and expenses are translated into Canadian dollars at the rate of exchange in effect at the transaction date. Foreign currency denominated monetary assets and liabilities are translated into Canadian dollars at the rate of exchange prevailing at the balance sheet date. Exchange gains or losses arising from translation of foreign denominated monetary balances and transactions are reflected in finance charges in the statement of operations.

## PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment in service are recorded at cost which includes materials, direct and indirect labour, an appropriate allocation of administration overhead and finance charges capitalized during construction. Property, plant and equipment in service include the cost of plant and equipment financed by contributions in aid of construction and contributions arising from the Columbia River Treaty. Upon retirement or disposal, any gain or loss is charged to amortization.

Unfinished construction consists of costs of property, plant and equipment that are under construction or not ready for service. Costs are transferred to property, plant and equipment in service when the constructed asset is substantially complete and capable of operation at a pre-determined significant level of capacity.

Property, plant and equipment in service are amortized on an individual or pooled basis over the expected useful lives of the assets, generally using the straight-line method.

The expected useful lives, in years, of BC Hydro's main classes of property, plant and equipment are:

Generation	
Hydraulic	50 - 100
Thermal	10 - 50
Lines	35 - 100
Substations	20 - 50
Buildings	45 - 50
Equipment	7 - 20
Computer hardware	2 - 10
Service vehicles	7 - 20
Sundry	20 - 45

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

## INTANGIBLE ASSETS

Intangible assets are recorded at cost. Intangible assets with indefinite useful lives are not subject to amortization. These assets are tested for impairment annually or more frequently if events indicate that the asset may be impaired.

Intangible assets with finite useful lives are amortized over their useful lives on a straight line basis. The expected useful lives, in years, are as follows:

Software	2 - 10
Land Rights	20
Clearings	100
Sundry	10 - 20

## IMPAIRMENT OF LONG-LIVED ASSETS

Long-lived assets, including property, plant and equipment and amortized intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be fully recoverable. Recoverability of assets is measured by a comparison of the carrying amount of the asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount exceeds its estimated future cash flows, an impairment charge is recognized by the amount that the carrying amount of the asset exceeds its fair value.

## CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash and units of a money market fund that are carried at fair value.

## INVENTORIES

Inventories are comprised of materials and supplies and natural gas and are valued at the lower of weighted average cost and net realizable value. Cost of materials and supplies includes invoiced costs and directly attributable costs of acquiring the inventory.

## FINANCIAL INSTRUMENTS

### FINANCIAL INSTRUMENTS - RECOGNITION AND MEASUREMENT

BC Hydro accounts for its financial instruments in accordance with Canadian Institute of Chartered Accountants (CICA) Handbook Section 3855, *Financial Instruments - Recognition and Measurement*. All financial instruments are required to be measured at fair value on initial recognition of the instrument, except for certain related party transactions. Measurement in subsequent periods depends on whether the financial instrument has been classified or designated as "held-for-trading", or classified as "available-for-sale", "held-to-maturity", "loans and receivables", or "other financial liabilities". Transaction costs are expensed as incurred for financial instruments classified or designated as held-for-trading. For other financial instruments, transaction costs are capitalized on initial recognition. All regular-way purchases or sales of financial assets are accounted for on a settlement date basis.

## BRITISH COLUMBIA HYDRO AND POWER AUTHORITY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

Financial assets and financial liabilities held-for-trading are measured at fair value with changes in those fair values recognized in net income. Financial assets classified as "available-for-sale" are measured at fair value, with changes in those fair values recognized in other comprehensive income. Financial assets classified as held-to-maturity, loans and receivables, and financial liabilities classified as other financial liabilities are measured at amortized cost using the effective interest method of amortization. Derivatives, including embedded derivatives that are not closely related to the host contract and must be separately accounted for, generally must be classified as held-for-trading and recorded at fair value in the consolidated balance sheet. The classification of financial instruments is described in Note 13.

### DERIVATIVE FINANCIAL INSTRUMENTS

BC Hydro and its subsidiaries use derivative financial instruments to manage interest rate and foreign exchange risks related to debt and exposure to electricity and natural gas commodity market prices.

Derivative financial instruments are classified as "held-for-trading" unless designated for hedge accounting. Derivative instruments that do not qualify as hedges, or are not designated as hedges, are recorded using the mark-to-market method of accounting whereby instruments are recorded as either an asset or liability with changes in fair value recognized in net income. Gains or losses from financial derivatives related to commodity prices are recognized in trade revenues. Gains or losses from financial derivatives related to foreign currency exchange rates are recognized in finance charges and domestic revenues.

Derivative financial instruments are used by BC Hydro to manage economic exposure to market risks relating to commodity prices, foreign currency exchange rates and interest rates. BC Hydro's policy for domestic operations is not to utilize derivative financial instruments for speculative purposes.

For energy trading activities and certain liability management derivatives that are not accounted for as hedges, mark-to-market accounting is applied. For energy trading, open trade positions that are derivative commodity instruments are recorded at fair value and recorded as assets or liabilities in the balance sheet. The changes in fair value of open positions, primarily resulting from changes in market prices subsequent to the transaction date, are recognized as gains or losses in the period of change. For energy trading activities, the gains or losses are included in trade revenues. For liability management activities, the related gains or losses are included in finance charges. For foreign currency exchange risk associated with natural gas commodities, the related gains or losses are included in domestic revenues.

### HEDGES

In a fair value hedging relationship, the carrying value of the hedged item is adjusted for unrealized gains or losses attributable to the hedged risk and recognized in net income. Changes in the fair value of the hedged item, to the extent that the hedging relationship is effective, are offset by changes in the fair value of the hedging derivative, which is also recorded in net income. When hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments to the carrying value of the hedged item are amortized to net income over the remaining term of the original hedging relationship, using the effective interest method of amortization.

In a cash flow hedging relationship, the effective portion of the change in the fair value of the hedging derivative is recognized in other comprehensive income. The ineffective portion is recognized in net income. The amounts recognized in accumulated other comprehensive income are reclassified to net income in the periods in which net income is affected by the variability in the cash flows of



BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

the hedged item. When hedge accounting is discontinued, the cumulative gain or loss previously recognized in accumulated other comprehensive income remains there until the forecast transaction occurs. When the hedged item is a non-financial asset or liability, the amount recognized in accumulated other comprehensive income is transferred to the carrying amount of the asset or liability when it is recognized. In other cases the amount recognized in accumulated other comprehensive income is transferred to net income in the same period that the hedged item affects net income.

Hedge accounting is discontinued prospectively when the derivative no longer qualifies as an effective hedge, the hedging relationship is discontinued, or the derivative is terminated or sold, or upon the sale or early termination of the hedged item.

#### FAIR VALUE

The fair value of financial instruments and energy trading positions reflect changes in the level of commodity market prices, interest and foreign exchange rates. Fair value is determined based on exchange or over-the-counter quotations. Where no such information is available, fair value is established through pricing models using inputs based on observable market data and reflects the amount that BC Hydro expects it would receive or pay to terminate the position at the date that the value is established.

Fair value amounts reflect management's best estimates considering various factors including closing exchange or over-the-counter quotations, estimates of future prices and foreign exchange rates, time value, counterparty and own credit risk, and volatility. The assumptions used in establishing fair value amounts could differ from actual prices and the impact of such variations could be material.

#### DEFERRED REVENUE

Deferred revenue consists principally of amounts received under the Skagit River Agreements. Under these agreements, BC Hydro is required to deliver a predetermined amount of electricity each year for an 80-year period ending in fiscal 2066. In return BC Hydro receives approximately US\$22 million each year for a 35-year period ending in fiscal 2021 and US\$100,000 (adjusted for inflation) each year for an 80-year period ending in fiscal 2066.

The amounts received under the Skagit River Agreements are deferred and included in income on an annuity basis over the electricity delivery period ending in fiscal 2066.

#### DEFERRED CONTRIBUTIONS

Contributions in aid of construction are amounts paid by certain customers toward the cost of property, plant and equipment required for the extension of services. These amounts are amortized over the expected useful life of the related assets.

Contributions arising from the Columbia River Treaty relate to three dams built by BC Hydro in the mid-1960s to regulate the flow of the Columbia River. The contributions were made to assist in financing the construction of the dams. These proceeds were deferred and are amortized to income over the period ending in fiscal 2025, the minimum term of the treaty.

#### ASSET RETIREMENT OBLIGATIONS

Asset retirement obligations are legal obligations associated with the retirement of long-lived assets. A liability is recorded in the period in which the obligation is incurred at the present value of the estimated future costs when a reasonable estimate of the fair value can be made. When a liability is initially recorded, BC Hydro capitalizes the costs by increasing the carrying value of the associated long-lived asset. The liability is adjusted for the passage of time through accretion (interest) expense and the capitalized cost is amortized over the useful life of the associated asset. Actual costs incurred upon settlement of an asset retirement obligation are charged against the related liability to the extent of the accrued balance. Any difference between the actual costs incurred upon settlement of the asset retirement obligation and the recorded liability is recognized as a gain or loss in earnings at that time.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

DEFINED BENEFIT PLANS

The cost of pensions and other post-retirement benefits earned by employees is actuarially determined using the projected benefit method prorated on service and management's best estimate of expected plan investment performance, salary escalation, retirement ages of employees and expected future health care costs. For the purpose of calculating the return on plan assets the assets are valued at fair value. The obligations are discounted using a market interest rate at the end of the year on high-quality corporate debt instruments that match the timing and amount of expected benefit payments.

Transitional obligations and assets and past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of active members at the date of amendment.

The excess of the net cumulative unamortized actuarial gain or loss over ten per cent of the greater of the benefit obligation and the fair value of plan assets at the beginning of the year is amortized over the average remaining service period of active employees. The average remaining service period of the active employees covered by the employee benefit plans is 11 years (2008 - 11 years). When the restructuring of a benefit plan gives rise to both a curtailment and a settlement of obligations, the curtailment is accounted for prior to the settlement.

ENVIRONMENTAL EXPENDITURES AND LIABILITIES

BC Hydro conducts its operations in a manner that enables it to meet existing statutory requirements of environmental legislation or standards. The objective is to minimize the impact on the quality of the natural and social environment, providing enhancements wherever practical.

Environmental expenditures are expensed as part of operating activities, unless they constitute an asset improvement or act to mitigate or prevent possible future contamination, in which case the expenditures are capitalized and amortized to income. Environmental liabilities are accrued when environmental expenditures related to activities of BC Hydro are considered likely and the costs can be reasonably estimated. Estimated liabilities are reviewed periodically and these reviews can result in adjustments to previously recorded items.

TAXES

BC Hydro pays local government taxes and grants in lieu to municipalities and regional districts. As a Crown Corporation, BC Hydro is exempt from Canadian federal and provincial income taxes.

COMPARATIVE FIGURES

Certain amounts in the prior year's statements related to derivative financial instrument assets and liabilities, employee future benefits, accrued liabilities and other long-term liabilities have been reclassified to conform to the current year's presentation.

## NOTE 2: CHANGE IN ACCOUNTING POLICY AND ADOPTION OF NEW ACCOUNTING STANDARDS

### CHANGE IN ACCOUNTING POLICY

BC Hydro's subsidiary Powerex has elected to change its accounting policy for recording revenues and related costs for physical derivative natural gas transactions. Under the previous accounting policy, settlements of derivative financial instruments involving the sale or purchase of physical natural gas was reported on a gross basis in the income statement as sales and cost of energy, respectively. As these contracts are considered derivative financial instruments, Powerex has determined it is more representative to present the revenues and related costs on a net basis upon settlement.

Prior year balances have been revised to conform with the new policy, resulting in a decrease in trade revenue and trade energy costs of \$644 million. There was no impact on net income and therefore, no adjustment to opening retained earnings.

### ACCOUNTING STANDARDS ADOPTED IN 2009

Effective April 1, 2008, BC Hydro adopted four new CICA accounting standards: (a) Section 1535, *Capital Disclosures*; (b) Section 3031, *Inventories*; and (c) Section 3862, *Financial Instruments - Disclosures*; and Section 3863, *Financial Instruments - Presentation*. The main requirements of these new standards and the resulting financial statement impact are described below.

#### (a) Capital Disclosures

CICA Section 1535 requires disclosure of: (i) an entity's objectives, policies and process for managing capital; (ii) quantitative data about what the entity considers as capital; and (iii) whether the entity has complied with any capital requirements and, if it has not complied, the consequences of such non-compliance. Refer to Note 6 for additional disclosures.

#### (b) Inventories

CICA Section 3031 provides significantly more guidance on the measurement of inventories, with an expanded definition of cost and the requirement that inventory must be measured at the lower of cost and net realizable value. In addition the section has additional disclosure requirements, including accounting policies, carrying values, and the amount of any inventory write-downs. Refer to Note 4 for additional disclosures.

#### (c) Financial Instruments - Disclosures and Financial Instruments - Presentation

CICA Section 3862, *Financial Instruments - Disclosures* and Section 3863, *Financial Instruments - Presentation* replace Handbook Section 3861, *Financial Instruments - Disclosure and Presentation*, revising and enhancing its disclosure requirements, and carrying forward unchanged its presentation requirements. These new sections place increased emphasis on disclosures about the nature and extent of risks arising from financial instruments and how the entity manages those risks. The incremental disclosures required as a result of adopting these Sections can be found in Note 13. The transitional provisions provide that certain of the incremental disclosures need not be provided on a comparative basis in the year of adoption.

#### (d) Credit Risk and the Fair Value of Financial Assets and Liabilities

In January 2009, the CICA Emerging Issues Committee ("EIC") issued EIC-173, *Credit Risk and the Fair Value of Financial Assets and Liabilities*. EIC-173 provides guidance that an entity's own credit risk and the credit risk of counterparties should be taken into account in determining the fair value of financial assets and liabilities. Adoption of this guidance is applied retrospectively without restatement of prior periods. For the year ended March 31, 2009, the revaluation of financial assets and liabilities resulted in a decrease in Net Income and Other Comprehensive Income of \$13 million and \$25 million, respectively. The adjustment to the April 1, 2008 opening balances for retrospective application of impacts prior to 2009 had no material effect on either opening Retained Earnings or Accumulated Other Comprehensive Income.

## NOTE 3: FUTURE ACCOUNTING CHANGES

### (a) International Financial Reporting Standards

In February 2008, the Canadian Accounting Standards Board (AcSB) confirmed that the use of IFRS will be required in 2011 for publicly accountable enterprises. IFRS will replace Canada's current Generally Accepted Accounting Principles (GAAP) for those enterprises. These include profit-oriented enterprises that are responsible to large or diverse groups of stakeholders, including government business enterprises, which would include crown corporations such as BC Hydro. The official changeover date is for interim and annual financial statements relating to fiscal years beginning on or after January 1, 2011. The Company is currently evaluating the impact of the transition to IFRS on its consolidated financial statements.

### (b) Goodwill and Intangible Assets

Effective April 1, 2009, the Company will adopt new CICA Handbook Section 3064, *Goodwill and Intangible Assets*. This section replaces CICA Handbook Section 3062, *Goodwill and Intangible Assets*, and establishes revised standards for the recognition, measurement, presentation and disclosure of goodwill and intangible assets. It is anticipated that these changes will not have a material impact on the Company's consolidated financial statements.

### (c) Accounting for Rate-Regulated Operations

In August 2007, the AcSB considered the comments received on its March 2007 Exposure Draft, "Rate-Regulated Operations," and decided to: (i) remove the temporary exemption in Section 1100, *Generally Accepted Accounting Principles*, pertaining to the application of that Section to the recognition and measurement of assets and liabilities arising from rate regulation; (ii) not withdraw from the Handbook all other recognition and measurement guidance relating specifically to rate-regulated operations; and (iii) retain AcG-19, *Disclosures by Entities Subject to Rate Regulation*, but to make consequential amendments to the Guideline as a result of the above changes. The changes are applicable prospectively to BC Hydro's fiscal year beginning on April 1, 2009. It is anticipated that these changes will not have a material impact on the Company's regulatory accounting practices.

## NOTE 4: INVENTORIES

(in millions)	2009	2008
Materials and supplies	\$ 75	\$ 69
Natural gas trading inventories	103	14
Total	\$ 178	\$ 83

Effective April 1, 2008, the Company retrospectively adopted CICA Handbook Section 3031, *Inventories*, with reclassification of comparative prior period amounts. This new section requires that certain major spare parts and standby equipment be reclassified from inventory to property, plant and equipment. The new Handbook section also allows previously recorded impairment losses taken on inventory to be reversed if there is evidence that the net realizable value has subsequently been recovered. Materials and supplies inventories are carried at cost and during the year ended March 31, 2009 there were no write downs recorded to reduce these inventory items to their net realizable value. Due to significant decreases in forward gas prices, natural gas trading inventories have been written down to net realizable value as at March 31, 2009.

The Company includes certain major spare parts as property, plant and equipment and depreciates these assets over their useful lives. To meet the requirements of the new section, on adoption the Company reclassified approximately \$55 million in asset components previously classified as materials and supplies to property, plant and equipment, and this is reflected in the March 31, 2008 comparative figures.

## NOTE 5: REGULATION

### RATE REGULATION

On March 13, 2009, the BCUC issued its decision on BC Hydro's F2009/F2010 Revenue Requirements Application (RRA). The approved rate increases for fiscal 2009 and fiscal 2010 are 2.34 per cent and 8.74 per cent, respectively. The BCUC had previously approved an interim rate increase of 6.56 per cent for fiscal 2009.

The BCUC also confirmed the 0.5 per cent deferral account rate rider for fiscal 2009, and a 1 per cent deferral account rate rider for fiscal 2010 for the purpose of recovering a portion of the current balances in the Heritage Deferral Account, Non Heritage Deferral Account, Trade Income Deferral Account and BCTC Deferral Account (collectively the "deferral accounts"). The rate rider has an indefinite term. Recovery of the deferral accounts as approved by the BCUC from the rate rider in fiscal 2009 was \$14 million. The interim rate in place for fiscal 2009 was higher than the final rate approved by the BCUC and as a result, BC Hydro will issue refunds to customers as a credit to their accounts and these refunds are accrued for as at March 31, 2009.

Results for the period ended March 31, 2009 reflect the approved rate increase for fiscal 2009 and all other directives issued by the BCUC in its decision which affect fiscal 2009 results.

### REGULATORY ACCOUNTS

The following regulatory assets and liabilities have been established through rate regulation. For the year ended March 31, 2009, the impact of regulatory accounting has resulted in an increase to net income of \$438 million (2008 - \$142 million increase).

<i>(in millions)</i>	2008	Transfers	Addition (Reduction)	Amortization	Net Change	2009
<b>Regulatory Assets</b>						
Heritage Deferral Account	\$ 78	—	274	(23)	251	\$ 329
Non-Heritage Deferral Account	52	43	(6)	(15)	(21)	74
BCTC Deferral Account	21	—	(6)	(6)	(12)	9
Demand-Side Management Programs	309	—	95	(42)	53	362
First Nation Negotiations, Litigation and Settlement Costs,	360	13	32	(6)	26	399
Other Regulatory Accounts	113	(50)	115	7	122	185
<b>Total Regulatory Assets</b>	<b>\$ 933</b>	<b>6</b>	<b>504</b>	<b>(85)</b>	<b>419</b>	<b>\$ 1,358</b>
<b>Regulatory Liabilities</b>						
Future Removal and Site Restoration Costs	\$ 192	—	—	(20)	(20)	\$ 172
Trade Income Deferral Account	103	—	7	(30)	(23)	80
Foreign Exchange Gains and Losses	66	—	(33)	24	(9)	57
Other Regulatory Accounts	—	—	33	—	33	33
<b>Total Regulatory Liabilities</b>	<b>\$ 361</b>	<b>—</b>	<b>7</b>	<b>(26)</b>	<b>(19)</b>	<b>342</b>
<b>Net Regulatory Asset</b>	<b>\$ 572</b>	<b>6</b>	<b>497</b>	<b>(59)</b>	<b>438</b>	<b>\$ 1,016</b>



BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

(in millions)	2007	Accounting Policy Change and Other	Addition (Reduction)	Amortization	Net Change	2008
<b>Regulatory Assets</b>						
Heritage Deferral Account	\$ 178	\$ (2)	\$ (48)	\$ (50)	\$ (98)	\$ 78
Non-Heritage Deferral Account	209	—	(98)	(59)	(157)	52
BCTC Deferral Account	13	—	12	(4)	8	21
Demand-Side Management Programs	282	—	63	(36)	27	309
First Nation Negotiations, Litigation and Settlement Costs	122	4	237	(3)	234	360
Other Regulatory Accounts	70	—	35	8	43	113
<b>Total Regulatory Assets</b>	<b>\$ 874</b>	<b>\$ 2</b>	<b>\$ 201</b>	<b>\$ (144)</b>	<b>\$ 57</b>	<b>\$ 933</b>
<b>Regulatory Liabilities</b>						
Future Removal and Site Restoration Costs	\$ 210	\$ —	\$ —	\$ (18)	\$ (18)	\$ 192
Trade Income Deferral Account	203	—	(43)	(57)	(100)	103
Foreign Exchange Gains and Losses	16	17	18	15	33	66
<b>Total Regulatory Liabilities</b>	<b>\$ 429</b>	<b>\$ 17</b>	<b>\$ (25)</b>	<b>\$ (60)</b>	<b>\$ (85)</b>	<b>\$ 361</b>
<b>Net Regulatory Asset</b>	<b>\$ 445</b>	<b>\$ (15)</b>	<b>\$ 226</b>	<b>\$ (84)</b>	<b>\$ 142</b>	<b>\$ 572</b>

#### HERITAGE DEFERRAL ACCOUNT (HDA)

Under a Special Directive issued by the Province, the BCUC was directed to authorize BC Hydro to establish the HDA. This account is intended to mitigate the impact of certain variances between the forecasted costs in a revenue requirements application and actual costs of service associated with the Heritage Resources by adjustment of net income. In the absence of rate regulation, GAAP would require the inclusion of these cost variances in operating results in the year in which they are incurred, which would have resulted in a \$251 million decrease in net income (2008 - \$98 million increase).

#### NON-HERITAGE DEFERRAL ACCOUNT (NHDA)

Under a Special Directive issued by the Province, BCUC approved the establishment of the NHDA, which is intended to mitigate the impact of certain cost variances between the forecasted costs in a revenue requirements application and actual costs related to energy acquisition and maintenance of BC Hydro's distribution assets by adjustment of net income. In its March 13, 2009 decision, the BCUC approved the deferral to the NHDA of cost of energy due to load variance against forecast, as well as the transfer of the fiscal 2007 Winter Storm Regulatory Account balance of \$43 million to the NHDA for recovery. In the absence of rate regulation, GAAP would require the inclusion of the cost variances deferred in the NHDA in operating results in the year in which they are incurred, which would have resulted in a \$21 million increase in net income (2008 - \$157 million increase).

#### BCTC DEFERRAL ACCOUNT

Under a Special Directive issued by the Province, variances that arise between the costs of transmission services included in BC Hydro's rates and BCTC's rates are deferred. In the absence of rate regulation, GAAP would require the inclusion of these cost variances in operating results in the year in which they are incurred, which would have resulted in a \$12 million increase in net income (2008 - \$8 million decrease).

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

DEMAND-SIDE MANAGEMENT PROGRAMS

Established under a regulatory order from the BCUC, demand-side management programs are designed to reduce the energy requirements on BC Hydro's system. Costs of the programs include materials, direct labour and applicable portions of administration charges, equipment costs, and incentives. Amounts are deferred and amortized on a straight-line basis over the anticipated period of benefit of the program, generally not in excess of ten years.

In the absence of rate regulation, GAAP would require period costs to be included in operating results in the year in which they are incurred. Costs relating to identifiable tangible assets that meet the capitalization criteria would be recorded as property, plant and equipment. In 2009, \$95 million of period costs were incurred and amortization of previously capitalized amounts totaled \$42 million (2008 - \$63 million and \$36 million, respectively). Consequently, net income would have been \$53 million lower than would have been recorded in the absence of rate regulation (2008 - \$27 million decrease).

FIRST NATION NEGOTIATIONS, LITIGATION AND SETTLEMENT COSTS

Established under a regulatory order, provisions for and costs incurred with respect to First Nation negotiations, litigation and settlements are deferred and costs incurred are amortized on a straight-line basis over a period of 10 years.

In the absence of rate regulation, GAAP would require period costs to be included in operating results in the year in which they are incurred. Costs relating to identifiable tangible assets that meet the capitalization criteria would be recorded as property, plant and equipment. In 2009, \$32 million (2008 - \$237 million) of period costs were recorded as regulatory assets, and the amortization of previously capitalized amounts totaled \$6 million (2008 - \$3 million). Consequently, net income would have been \$26 million lower than would have been recorded in the absence of rate regulation (2008 - \$234 million decrease).

OTHER REGULATORY ACCOUNTS

Included in other regulatory accounts are the following regulatory assets and liabilities: Foreign Exchange Gains and Losses Arising from the Translation of Specified Foreign Currency Financial Instruments, Site C Costs, Depreciation Study Adjustments, Contributions in Aid of Construction Amortization Variance, Procurement Enhancement Initiative costs, Capital Project Investigation costs and Smart Metering and Infrastructure project costs. All of these accounts have been approved by the BCUC through regulatory order, except for the Smart Metering and Infrastructure project costs for which BC Hydro applied to the BCUC for approval in May 2009.

In addition to the above accounts, in its March 13, 2009 decision on the F2009/2010 RRA, the BCUC approved new regulatory asset and liability accounts for the following:

- Employment Cost regulatory account for capturing variance between actual and planned net employment costs
- Amortization regulatory account for capturing differences between actual and planned amortization resulting from variances in capital additions
- Finance Charges regulatory account for differences between actual and planned finance charges
- Taxes regulatory account for the deferral of differences between forecast and actual school taxes and grants-in-lieu
- Storm Damage regulatory account for capturing the variance between actual storm-related costs and the average of the last five normal weather years
- GM Shrum Unit 3 Outage regulatory account for all incurred and future direct and indirect costs related to the Unit 3 failure

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

BC Hydro is carrying out a Home Purchase Offer Program (HPOP) for owners of certain residential properties located on BC Hydro's transmission right of way corridor located between Tsawwassen Substation and English Bluff Terminal Station. Purchase agreements for 104 properties totaling approximately \$62 million have been finalized and purchases are planned to be concluded by the end of September 2009. HPOP net costs will be recorded in a regulatory account per Direction No. 1 to the BCUC dated March 12, 2009 and will be recovered in future rates.

In 2009, \$89 million of costs deferred to these accounts would have decreased net income in the absence of rate regulation (2008 - \$43 million decrease).

**FUTURE REMOVAL AND SITE RESTORATION COSTS**

As part of its October 2004 decision, BCUC ordered the establishment of a regulatory provision for future removal and site restoration costs. This account was established in 2006 by a one-time transfer of \$251 million from retained earnings. The costs of dismantling and disposal of property, plant and equipment will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation.

This liability has been recognized solely as a result of rate regulation as costs for future removal and site restoration have been established in excess of amounts required as asset retirement obligations. In the absence of rate regulation, it is likely that a liability would not be recognized. The amortization of previously capitalized amounts totaled \$20 million in the current year (2008 - \$18 million). Consequently, net income would be \$20 million lower than would have been recorded in the absence of rate regulation.

**TRADE INCOME DEFERRED ACCOUNT**

Established under a Special Directive issued by the Province, this account is intended to mitigate the uncertainty associated with forecasting the net income of BC Hydro's trade activities. The impact is to defer the difference between the Trade Income forecast in the revenue requirements application and actual Trade Income. For the purposes of this calculation, Trade Income is defined as the net income of Powerex based on GAAP. The difference between the Trade Income forecast and actual Trade Income is deferred except for amounts arising from a net loss in Trade Income or the portion of Trade Income in excess of \$200 million.

In the absence of rate regulation, GAAP would require the inclusion of actual Trade Income to be reflected in operating results, regardless of the variance between forecast and actual amounts, which would have resulted in a \$23 million decrease in net income (2008 - \$100 million increase).

For certain of the regulatory items identified above, the expected recovery or settlement period, or likelihood of recovery or settlement, is affected by risks and uncertainties relating to the ultimate authority of BCUC and operating results experienced during the year.

**NOTE 6 CAPITAL MANAGEMENT**

Orders in Council from the Province establish the basis for determining BC Hydro's equity for regulatory purposes, as well as its allowed return on equity and the annual Payment to the Province. Capital requirements are consequently managed through the retention of equity subsequent to the Payment to the Province and the imposed requirement of maintaining a debt to equity ratio not exceeding 80:20.

BC Hydro monitors its capital structure on the basis of its debt to equity ratio. For this purpose, BC Hydro defines debt as revolving borrowings and interest-bearing borrowings less investments held in sinking funds and cash and cash equivalents. Effective April 1, 2008

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

equity for regulatory purposes comprises retained earnings and accumulated other comprehensive income. In the prior year, equity for regulatory purposes comprised retained earnings, deferred revenue, contributions arising from the Columbia River Treaty and contributions in aid of construction. The change was enacted by the Province on January 17, 2008.

BC Hydro manages its capital so as not to exceed the 80:20 debt to equity ratio as defined by the Province. During the year ended March 31, 2009, there were no changes in this approach to capital management.

The debt to equity ratio, based on equity as defined for regulatory purposes, at March 31, 2009 and March 31, 2008 was as follows:

<i>(in millions)</i>	2009	2008
Total long-term debt, net of sinking funds	\$ 9,325	\$ 7,541
Less: cash and cash equivalents	(190)	(22)
<b>Net Debt</b>	<b>\$ 9,135</b>	<b>\$ 7,519</b>
Retained earnings	2,231	1,865
Accumulated other comprehensive income	(42)	56
Deferred revenue	—	368
Contributions from the Columbia River Treaty	—	157
Contributions in aid of construction	—	825
<b>Total Equity</b>	<b>\$ 2,189</b>	<b>\$ 3,271</b>
<b>Net Debt to Equity Ratio for Regulatory Purposes</b>	<b>81 : 19</b>	<b>70 : 30</b>

*Payment to the Province*

Under a Special Directive from the Province, BC Hydro is required to make an annual Payment to the Province (the Payment) on or before June 30 of each year. The Payment is equal to 85 per cent of BC Hydro's distributable surplus for the most recently completed fiscal year assuming that the debt to equity ratio, as defined by the Province, after deducting the Payment, is not greater than 80:20. If the Payment would result in a debt to equity ratio exceeding 80:20, then the Payment will be based on the greatest amount that can be paid without causing the debt to equity ratio to exceed 80:20. No payment will be made to the Province in 2009 (2008 - \$288 million).

## NOTE 7: AMORTIZATION

<i>(in millions)</i>	2009	2008
Amortization of property, plant and equipment in service	\$ 359	\$ 338
Amortization of intangible assets	41	42
Amortization of deferred contributions	(33)	(31)
Property, plant and equipment written-off	6	12
Dismantling costs	20	18
[Gain] loss on sale, retirement and disposal of assets	1	(11)
<b>Total</b>	<b>\$ 394</b>	<b>\$ 368</b>

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

## NOTE 8: FINANCE CHARGES

<i>(in millions)</i>	2009	2008
Interest on long-term debt	\$ 504	\$ 512
Sinking fund income	(8)	(25)
Foreign exchange [gains] losses	33	(17)
Other	(7)	29
	522	499
Less: Assigned to unfinished construction	(50)	(36)
Total	\$ 472	\$ 463

## NOTE 9: PROPERTY, PLANT AND EQUIPMENT

<i>(in millions)</i>	2009				2008			
	Property, Plant and Equipment in Service	Accumulated Amortization	Unfinished Construction	Net Book Value	Property, Plant and Equipment in Service	Accumulated Amortization	Unfinished Construction	Net Book Value
<b>Generation</b>								
Hydraulic	\$ 5,988	\$ 2,067	\$ 354	\$ 4,275	\$ 5,730	\$ 1,978	\$ 303	\$ 4,055
Thermal	427	272	11	166	411	259	9	161
Diesel	49	27	5	27	49	25	—	24
	6,464	2,366	370	4,468	6,190	2,262	312	4,240
<b>Lines</b>	7,693	2,926	321	5,088	7,079	2,808	283	4,554
<b>Substations</b>	2,758	1,295	148	1,611	2,563	1,252	170	1,481
<b>Other</b>								
Land and buildings	445	197	49	297	407	189	41	259
Equipment	181	115	6	72	182	120	3	65
Computer hardware	72	45	58	85	62	40	28	50
Service vehicles	148	63	12	97	131	63	10	78
Sundry	21	10	16	27	28	16	4	16
	867	430	141	578	810	428	86	468
<b>Total</b>	\$ 17,782	\$ 7,017	\$ 980	\$ 11,745	\$ 16,642	\$ 6,750	\$ 851	\$ 10,743



## NOTE 10: INTANGIBLE ASSETS

	2009			2008		
	Cost	Accumulated Amortization	Net Book Value	Cost	Accumulated Amortization	Net Book Value
<b>Subject to Amortization</b>						
Software	\$ 356	\$ 233	\$ 123	\$ 357	\$ 218	\$ 139
Clearing	178	60	118	178	58	120
Sundry	37	16	21	37	12	25
	571	309	262	572	288	284
<b>Not Subject to Amortization</b>						
Land Rights	133	—	133	127	—	127
<b>Total</b>	<b>\$ 704</b>	<b>\$ 309</b>	<b>\$ 395</b>	<b>\$ 699</b>	<b>\$ 288</b>	<b>\$ 411</b>

## NOTE 11: SINKING FUNDS

Sinking funds are held by the Trustee (the Minister of Finance for the Province) for the redemption of long-term debt. The sinking fund balances at the balance sheet date include the following investments:

	2009		2008	
	Carrying Value	Weighted Average Effective Rate <sup>1</sup>	Carrying Value	Weighted Average Effective Rate <sup>1</sup>
Money market funds <sup>2</sup>	\$ 2	0.2%	\$ 509	2.8%
Province and BC Crown Corporation bonds	74	4.3 %	54	4.7%
Federal and other provincial government securities	39	5.0 %	32	4.8%
<b>Total</b>	<b>\$ 115</b>		<b>\$ 595</b>	

<sup>1</sup> Rate calculated on market yield to maturity.

<sup>2</sup> Money market funds consist of federal and provincial government paper and high-grade commercial paper with a maturity of one year or less.

Effective December 12, 2005, all sinking fund payment requirements on all new and outstanding debt have been removed.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

## NOTE 12: LONG TERM DEBT AND DEBT MANAGEMENT

BC Hydro's long-term debt comprises bonds and debentures and revolving borrowings obtained under an agreement with the Province.

The Board of Directors approved commercial paper borrowing program, which includes revolving borrowings, is limited to \$2,000 million. At March 31, 2009, the outstanding amount under the borrowing limit was \$1,691 million (2008 - \$996 million).

During fiscal 2009, BC Hydro issued bonds totaling \$352 million (2008 - \$830 million) with a weighted average effective interest rate of 4.6 per cent (2008 - 4.9 per cent) and a weighted average term to maturity of 19.2 years (2008 - 20.4 years).

Long-term debt, expressed in Canadian dollars, is summarized in the following table by year of maturity:

(dollar amounts in millions of Canadian dollars)				2009		2008	
	Canadian	US	Total	Weighted Average Interest Rate <sup>1</sup>	Canadian	US	Weighted Average Interest Rate <sup>1</sup>
Maturing in fiscal:							
2009	\$ —	\$ —	\$ —	—	\$ 94	\$ —	10.1
2010	574	63	637	6.5	574	51	6.5
2011	150	—	150	6.5	150	—	6.5
2012	450	—	450	6.1	450	—	6.1
2013	200	—	200	4.8	200	—	4.8
2014	500	252	752	6.4	—	—	—
1-5 years	1,874	315	2,189	6.2	1,468	51	6.4
6-10 years	675	252	927	5.1	975	206	6.1
11-15 years	1,701	—	1,701	8.8	1,801	—	8.5
16-20 years	10	630	640	6.6	110	514	6.9
21-25 years	1,300	—	1,300	5.4	1,300	—	5.4
26-30 years	—	378	378	7.4	—	308	7.4
Over 30 years	350	—	350	5.0	200	—	4.9
Bonds and debentures	5,910	1,575	7,485	6.6	5,854	1,079	6.7
Revolving borrowings	1,691	—	1,691	1.0	996	—	3.4
	7,601	1,575	9,176		6,850	1,079	7,929
Adjustments to carrying value resulting from hedge accounting	147	27	174		88	20	108
Unamortized premium, discount, and issue costs	106	(16)	90		112	(13)	99
	\$ 7,854	\$ 1,586	\$ 9,440		\$ 7,050	\$ 1,086	\$ 8,136
Less: Current portion			2,331				1,090
Long-term debt			\$ 7,109				\$ 7,046

<sup>1</sup> The weighted average interest rate represents the effective rate of interest on fixed-rate bonds and the current interest in effect at March 31 for floating-rate bonds, all before considering the effect of derivative financial instruments used to manage interest rate risk.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

The following interest rate contracts were in place at March 31, 2009 in an asset position of \$68 million (2008 – \$67 million). Floating rates are based on the effective rates at the balance sheet date and vary over time. Such contracts are used to hedge the impact of interest rate changes on debt.

<i>(dollar amounts in millions)</i>	2009	2008
<b>Receive fixed, pay floating rate swaps</b>		
Notional amount <sup>1</sup>	\$ 1,565	\$ 1,957
Weighted average receive rate	4.48%	4.57%
Weighted average pay rate	1.03%	3.83%
Weighted terms	3 years	4 years
<b>Receive floating, pay fixed rate swaps</b>		
Notional amount <sup>1</sup>	\$ 290	\$ 290
Weighted average receive rate	0.96%	4.01%
Weighted average pay rate	4.90%	4.90%
Weighted terms	4 years	5 years

<sup>1</sup> Notional amount for a derivative instrument is defined as the contractual amount on which payments are calculated.

The following foreign currency contracts were in place at March 31, 2009 in an asset position of \$14 million (2008 – liability of \$144 million) were in place at March 31, 2009. Such contracts are primarily used to hedge foreign dollar principal and interest payments.

<i>(dollar amounts in millions)</i>	2009	2008
<b>Cross-Currency Swaps</b>		
United States dollar to Canadian dollar – notional amount <sup>1</sup>	US \$200	US \$200
United States dollar to Canadian dollar – weighted average contract rate	1.45	1.45
Weighted remaining term	4 years	5 years

<sup>1</sup> Notional amount for a derivative instrument is defined as the contractual amount on which payments are calculated.

<i>(dollar amounts in millions)</i>	2009	2008
<b>Foreign Currency Forwards</b>		
United States dollar – notional amount <sup>1</sup>	US \$898	US \$767
United States dollar – weighted average contract rate	1.19	1.21
Weighted remaining term	16 years	17 years

<sup>1</sup> Notional amount for a derivative instrument is defined as the contractual amount on which payments are calculated.

## NOTE 13: FINANCIAL INSTRUMENTS

### FINANCIAL RISKS

BC Hydro is exposed to a number of financial risks in the normal course of its business operations, including market risks resulting from fluctuations in commodity prices, interest rates and foreign currency exchange rates, as well as credit risks and liquidity risks. The nature of the financial risks and BC Hydro's strategy for managing these risks has not changed significantly from the prior period.

The following discussion is limited to the nature and extent of risks arising from financial instruments, as defined under Section 3862 of the CICA Handbook. However, for a complete understanding of the nature and extent of risks BC Hydro is exposed to, this note should be read in conjunction with BC Hydro's discussion of Risk Management found in the Management Discussion and Analysis section of the 2009 Annual Report.

#### (a) Credit Risk

Credit risk refers to the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. BC Hydro is exposed to credit risk related to cash and cash equivalents, short-term and long-term investments, and derivative instruments. It is also exposed to credit risk related to accounts receivable arising from its day to day electricity and natural gas sales in and outside British Columbia. Maximum credit risk with respect to financial assets is limited to the carrying amount presented on the balance sheet with the exception of US dollar sinking funds classified as held-to-maturity and carried on the balance sheet at amortized cost of \$113. The maximum credit risk exposure for these US dollar sinking funds as at March 31, 2009 is its fair value of \$124 (refer to the table on Page 100). BC Hydro manages this risk through Board-approved credit risk management policies which contain limits and procedures to the selection of counterparties. Exposures to credit risks are monitored on a regular basis.

#### (b) Liquidity Risk

Liquidity risk refers to the risk that BC Hydro will encounter difficulty in meeting obligations associated with financial liabilities. BC Hydro manages liquidity risk by forecasting cash flows to identify financing requirements and by maintaining committed credit facilities. BC Hydro's long-term debt comprises bonds and debentures and revolving borrowings obtained under an agreement with the Province. Cash from operations reduces BC Hydro's liquidity risk. BC Hydro does not believe that it will encounter difficulty in meeting its obligations associated with financial liabilities.

BC Hydro was previously subject to an overall borrowing limit imposed by legislation of \$8,800, net of sinking funds, as defined by the *Hydro Power and Authority Act*. This limit was repealed effective May 1, 2008.

#### (c) Market Risks

Market risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk, and price risk, such as changes in commodity prices and equity values. BC Hydro monitors its exposure to market fluctuations and may use derivative contracts to manage these risks, as it considers appropriate. Other than in its energy trading subsidiary Powerex, BC Hydro does not use derivative contracts for trading or speculative purposes.

##### i. Currency Risk

Currency risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. BC Hydro's currency risk is primarily with the US dollar.

The majority of BC Hydro's currency risk arises from long-term debt in the form of US dollar denominated bonds. Energy commodity prices are also subject to currency risk as they are primarily denominated in US dollars. As a result, BC Hydro's trade revenues and purchases of energy commodities, such as electricity and natural gas, and associated accounts receivable and accounts payable, are affected by the Canadian/US dollar exchange rate. In addition, all commodity derivatives and contracts priced in US dollars are also affected by the Canadian/US dollar exchange rate.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

BC Hydro actively manages its currency risk through a number of Board-approved policy documents. BC Hydro uses cross currency swaps and forward foreign exchange purchase contracts to achieve and maintain the Board-approved US dollar exposure targets.

**ii. Interest Rate Risk**

Interest rate risk refers to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. BC Hydro is exposed to changes in interest rates primarily through its variable rate debt and the active management of its debt portfolio including its related sinking fund assets and temporary investments. BC Hydro Board-approved debt management strategies include maintaining a percentage of variable interest rate debt within a certain range. BC Hydro enters into interest rate swaps to achieve and maintain the target range of variable interest rate debt.

**iii. Commodity Price Risk**

BC Hydro is exposed to commodity price risk as fluctuations in electricity prices and natural gas prices could have a materially adverse effect on its financial condition. Prices for electricity and natural gas fluctuate in response to changes in supply and demand, market uncertainty, and a variety of other factors beyond BC Hydro's control.

BC Hydro enters into derivative contracts to manage commodity price risk. Risk management strategies, policies and limits are designed to ensure BC Hydro's risks and related exposures are aligned with the Company's business objectives and risk tolerance. Risks are managed within defined limits that are regularly reviewed by the Board of Directors.

FINANCIAL INSTRUMENTS, INTEREST AND OTHER INCOME AND EXPENSE

The following table provides a comparison of carrying values and fair values for non-derivative financial instruments as at March 31, 2009:

	March 31, 2009		March 31, 2008		Interest Income [Expense] recognized into income For the year ended March 31, 2009
(in millions)	Carrying Value	Fair Value	Carrying Value	Fair Value	
<b>Held for Trading:</b>					
Cash and cash equivalents	\$ 190	\$ 190	\$ 22	\$ 22	\$ 3
Revolving borrowings - Cdn	(1,691)	(1,691)	(996)	(996)	\$ (26)
<b>Loans and Receivables:</b>					
Accounts receivable and accrued revenue	\$ 713	\$ 713	\$ 537	\$ 537	\$ —
<b>Available for Sale:</b>					
Sinking funds - Cdn	\$ —	\$ —	\$ 506	\$ 506	\$ —
Sinking funds - US	\$ 2	\$ 2	\$ —	\$ —	\$ —
<b>Held to Maturity:</b>					
Sinking funds - US	\$ 113	\$ 124	\$ 89	\$ 98	\$ 5
<b>Other Financial Liabilities:</b>					
Accounts payable and accrued liabilities	\$ (1,272)	\$ (1,272)	\$ (1,266)	\$ (1,266)	\$ —
Long-term debt (including current portion due in one year)	\$ (7,749)	\$ (8,981)	\$ (7,140)	\$ (8,329)	\$ (476)



BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

For non-derivative financial assets and liabilities classified as held-for-trading, loans and receivables, available-for-sale, held-to-maturity and other financial liabilities, \$2 million has been recognized in net income for the period relating to changes in fair value. For loans and receivables, the carrying value approximates fair value and amortized cost due to the short term nature of these financial instruments. For available-for-sale financial assets, no amount has been recorded in other comprehensive income and no amount was removed from other comprehensive income and reported in net income for the period.

The fair value of derivative instruments, designated or not designated as hedges, was as follows:

	2009		2008	
(in millions)	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Designated Hedges Used to Manage Risk</b>				
<b>Associated with Long-term Debt:</b>				
Foreign currency contracts (cash flow hedges for \$US denominated long-term debt)	\$ (1)	\$ (1)	\$ (148)	\$ (148)
Interest rate swaps (fair value hedges for debt)	83	83	73	73
	82	82	(75)	(75)
<b>Non-Designated Hedges:</b>				
Foreign currency contracts	3	3	—	—
Commodity derivatives	13	13	(4)	(4)
Embedded derivatives	(3)	(3)	(2)	(2)
	13	13	(6)	(6)
<b>Total</b>	<b>\$ 95</b>	<b>\$ 95</b>	<b>\$ (81)</b>	<b>\$ (81)</b>

Represented by:

	2009	2008
Current portion of derivative financial instrument assets	\$ 836	\$ 559
Current portion of derivative financial instrument liabilities	(877)	(561)
Derivative financial instrument assets	331	170
Derivative financial instrument liabilities, long-term	(195)	(249)
<b>Total</b>	<b>\$ 95</b>	<b>\$ (81)</b>

As at March 31, 2009 there were no non-designated interest rate swaps.

For the year ended March 31, 2009, a loss of \$3 million was recognized in finance charges related to the ineffective portion of designated cash flow hedges and fair value hedges. For designated cash flow hedges for the year ended March 31, 2009, a gain of \$151 million was recognized in other comprehensive income. For the year ended March 31, 2009, \$249 million was removed from other comprehensive income and reported in net income, offsetting foreign exchange losses recorded in the year.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

For derivatives not designated as hedging instruments, a gain of \$2 million was recognized in domestic revenue for the year ended March 31, 2009 with respect to operational hedges and embedded derivatives. A gain of \$1 million was recognized in finance charges for the year ended March 31, 2009 with respect to foreign currency contracts for cash management purposes. A gain of \$62 million was recorded in trade revenue for the year ended March 31, 2009 with respect to commodity derivatives.

## DOMESTIC ELECTRICITY RECEIVABLES

A customer application and a credit check are required prior to initiation of services. For customers with no BC Hydro credit history, call centre agents ensure accounts are secured either by a credit bureau check, a cash security deposit, or a credit reference letter.

The value of domestic and trade accounts receivable, by age and the related provision for doubtful accounts are presented in the following tables.

### DOMESTIC AND TRADE ACCOUNTS RECEIVABLE NET OF ALLOWANCE FOR DOUBTFUL ACCOUNTS

(in millions)

Current	\$	465
Past due (30-59 days)		20
Past due (60-89 days)		5
Past due (more than 90 days)		4
		494
Allowance for doubtful accounts		(9)
Total	\$	485

At the end of each reporting period a review of the provision for doubtful accounts is performed. It is an assessment of the potential amount of domestic and trade accounts receivable which will not be paid by customers after the balance sheet date. The assessment is made by reference to age, status and risk of each receivable, current economic conditions, and historical information. The following table presents a summary of the movement of the allowance for doubtful accounts.

(in millions)

Balance as at April 1, 2008	\$	(6)
Additions during the period		(3)
Amounts written off during the period		—
Balance as at March 31, 2009	\$	(9)

## FINANCIAL ASSETS ARISING FROM BC HYDRO'S TRADING ACTIVITIES

A substantial majority of BC Hydro's counterparties associated with its trading activities are in the energy sector. This industry concentration has the potential to impact the Company's overall exposure to credit risk in that the counterparties may be similarly affected by changes in economic, regulatory, political, and other factors. The Company manages credit risk by authorizing trading transactions within the guidelines of the Company's risk management policies, by monitoring the credit risk exposure and credit standing of counterparties on a regular basis, and by obtaining credit assurances from counterparties to which they are entitled under contract.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

The Company regularly uses standard master netting agreements that allow for netting of exposures and often include margining provisions. In addition, the Company has credit loss insurance that covers most credit exposure associated with transactions that are delivered in the United States.

With respect to these financial assets, BC Hydro assigns credit limits for counterparties based on evaluations of their financial condition, net worth, regulatory environment, cost recovery mechanisms, credit ratings, and other credit criteria as deemed appropriate. Credit limits and credit quality are monitored periodically and a detailed credit analysis is performed at least annually. Further, BC Hydro has tied a portion of its contracts to master agreements that require security in the form of cash or letters of credit if current net receivables and replacement cost exposure exceed contractually specified limits. The following table outlines the distribution, by credit rating, of financial assets that are neither past due nor impaired:

	Investment Grade %	Unrated %	Non-Invested Grade %	Total %
Accounts receivable	79	18	3	100
Derivative commodity assets	98	2	0	100

The outstanding amount of collateral received from customers at March 31, 2009 was \$48 million.

#### LIQUIDITY RISK

The following table details remaining contractual maturities at March 31, 2009 of BC Hydro's non-derivative financial liabilities and derivative financial liabilities, which are based on contractual undiscounted cash flows. Interest payments have been computed using contractual rates or, if floating, based on rates current at March 31, 2009. In respect of the cash flows in US dollars, the exchange rate as at March 31, 2009 has been used.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

	Carrying Value	Fiscal 2010	Fiscal 2011	Fiscal 2012	Fiscal 2013	Fiscal 2014	Fiscal 2015 and thereafter
<i>(in millions)</i>							
<b>Non-Derivative Financial Liabilities</b>							
Total trade and other payables (excluding interest accruals)	\$ 1,126	\$(1,126)	\$ —	\$ —	\$ —	\$ —	\$ —
Bank overdrafts	22	(22)	—	—	—	—	—
Long-term debt (including interest payments)	9,564	(2,803)	(603)	(892)	(615)	(1,126)	(9,383)
		(3,951)	(603)	(892)	(615)	(1,126)	(9,383)
<b>Derivative Financial Liabilities</b>							
Interest rate swaps used for hedging	35	(9)	(11)	(10)	(8)	(4)	—
Cross currency swaps used for hedging	40						
Cash outflow		(8)	(3)	(4)	(6)	(294)	—
Cash inflow		7	4	4	7	256	—
Forward foreign exchange contracts used for hedging	(54)						
Cash outflow		(101)	—	—	—	—	(923)
Cash inflow		116	—	—	—	—	974
Other forward foreign exchange contracts designated at fair value	—						
Cash outflow		(36)	—	—	—	—	—
Cash inflow		37	—	—	—	—	—
Financially settled commodity derivative liabilities designated at fair value	911	(730)	(166)	(15)	(2)	—	—
Physically settled commodity derivative liabilities designated at fair value	84	(136)	8	(14)	—	—	—
		(860)	(168)	(39)	(9)	(42)	51
<b>Total</b>		<b>(4,811)</b>	<b>(771)</b>	<b>(931)</b>	<b>(624)</b>	<b>(1,168)</b>	<b>(9,332)</b>
Financially settled commodity derivative assets designated at fair value	(739)	638	116	11	1	—	—
Physically settled commodity derivative assets designated at fair value	(269)	420	199	80	2	2	—
<b>Net Total<sup>1</sup></b>		<b>\$(3,753)</b>	<b>\$ (456)</b>	<b>\$ (840)</b>	<b>\$ (621)</b>	<b>\$(1,166)</b>	<b>\$(9,332)</b>

<sup>1</sup> BC Hydro believes that the liquidity risk associated with derivative financial liabilities needs to be considered in conjunction with the profile of payments or receipts arising from derivative financial assets. It should be noted that cash flows associated with future energy sales and commodity contracts which are not considered financial instruments under Section 3855 are not included in this analysis, which is prepared in accordance with Section 3862.

## MARKET RISKS

### (a) Currency Risk

#### Sensitivity Analysis

A \$0.01 strengthening or weakening of the US dollar against the Canadian dollar at March 31, 2009 would have no impact on net income and would have no material impact on other comprehensive income. The new regulatory account that captures all variances from forecasted finance charges as described in Note 5 eliminates any impact on net income. This analysis assumes that all other variables, in particular interest rates, remain constant.

This sensitivity analysis has been determined assuming that the change in foreign exchange rates had occurred at March 31, 2009 and had been applied to each of BC Hydro's exposure to currency risk for both derivative and non-derivative financial instruments in existence at that date, and that all other variables remain constant. The stated change represents management's assessment of reasonably possible changes in foreign exchange rates over the period until the next quarter end balance sheet date.

### (b) Interest Rate Risk

#### Fair value sensitivity analysis for fixed rate non-derivative instruments

BC Hydro does not account for any fixed rate financial assets or liabilities as held-for-trading or available-for-sale. Therefore a change in interest rates at March 31, 2009 would not affect net income or other comprehensive income with respect to these fixed rate instruments.

#### Sensitivity analysis for variable rate non-derivative instruments and derivative instruments

An increase or decrease of 100-basis points in interest rates at March 31, 2009 would have no impact on net income and would have no material impact on other comprehensive income. The new regulatory account that captures all variances from forecasted finance charges as described in Note 5 eliminates any impact on net income. This analysis assumes that all other variables, in particular foreign exchange rates, remain constant.

This sensitivity analysis has been determined assuming that the change in interest rates had occurred at March 31, 2009 and had been applied to each of BC Hydro's exposure to interest rate risk for both derivative and non-derivative financial instruments in existence at that date, and that all other variables remain constant. The stated change represents management's assessment of reasonably possible changes in interest rates over the period until the next quarter end balance sheet date.

### (c) Commodity Price Risk

#### Sensitivity Analysis

BC Hydro's subsidiary Powerex trades and delivers energy and associated products and services throughout North America and enters into derivative contracts to manage their commodity price risks. As a result, BC Hydro has exposure to movements in certain commodity prices, including the market price of electricity and fuels used to produce electricity. BC Hydro manages these exposures through an established risk management framework that limits components of and overall market risk exposures, delegates authority to trade, pre-defines approved products, and mandates regular reporting of exposures. A Risk Management Committee forms a key part of the corporate governance framework.

BC Hydro's trading activities are subject to various limits and controls, including Value at Risk in US dollars ("VaR"), Stop-Loss/Gain limits, and transaction limits. These various market risk limits are approved by the Board of Directors. A VaR measure estimates the pre-tax forward trading loss that could result from changes in the forward price curve, with a specific level of confidence, over a specific time period. Powerex uses an industry standard monte carlo VaR model, a 95 per cent confidence interval, and a 10-day holding-period.

Powerex's VaR, calculated under the methodology described above, was approximately US \$11 million at March 31, 2009.

VaR as a measure of portfolio risk has several limitations. It is a lagging indicator of price risk given the recent historical volatilities in the market place and it cannot forecast unusual outlier events that may occur in the future. In addition, it is sometimes difficult to appropriately estimate the VaR associated with illiquid or non-standard products. As a result, Powerex uses additional measures to supplement the use of VaR to measure price risk. These include the use of a historic VaR methodology, weekly stress tests, notional limits for illiquid or emerging products, and independent reporting regarding non-standard options.



## NOTE 14: DEFERRED CONTRIBUTIONS

<i>(in millions)</i>	2009	2008
Contributions in aid of construction	\$ 898	\$ 825
Contributions arising from the Columbia River Treaty	148	157
Total	\$ 1,046	\$ 982

## NOTE 15: OTHER LONG-TERM LIABILITIES

<i>(in millions)</i>	2009	2008
Environmental liabilities	\$ 14	\$ 16
Accrued pension benefit liability (Note 16)	84	80
Accrued other benefit plan liability (Note 16)	197	183
First Nations liabilities	326	317
Deferred revenue	381	368
Asset retirement obligations	5	7
Total	\$ 1,007	\$ 971

For asset retirement obligations, BC Hydro estimates the undiscounted amount of cash flows required to settle the asset retirement obligation is approximately \$22 million, which will be incurred between 2010 and 2018. A discount rate of 5.9 per cent was used to calculate the carrying value of the asset retirement obligations.

## NOTE 16: EMPLOYEE FUTURE BENEFIT PLANS

BC Hydro provides a defined benefit statutory pension plan to substantially all employees, as well as supplemental arrangements which provide pension benefits in excess of statutory limits to certain employees. Pension benefits are based on years of membership service and highest five-year average pensionable earnings. Annual cost-of-living increases are provided to pensioners to the extent that funds are available in the indexing fund. Employees make basic and indexing contributions to the plan funds based on a percentage of current pensionable earnings. BC Hydro contributes amounts as prescribed by an independent actuary. BC Hydro is responsible for ensuring that the statutory pension plan has sufficient assets to pay the pension benefits upon retirement of employees. The supplemental arrangements are unfunded. The most recent actuarial funding valuation for the statutory pension plan was performed at December 31, 2006. The next valuation for funding purposes will be as of December 31, 2009.

BC Hydro also provides post-retirement benefits other than pensions including medical, extended health and life insurance coverage for retirees who have at least 10 years of service and qualify to receive pension benefits. Certain benefits, including the short-term continuation of health care and life insurance, are provided to terminated employees or to survivors on the death of an employee. These other post-retirement benefits and post-employment benefits are not funded. Post-employment benefits include the pay-out of benefits that vest or accumulate, such as banked vacation.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

Information about the benefit plans, post-retirement benefits and post-employment benefits other than pensions is as follows:

(a) The net expense for BC Hydro's benefit plans is as follows:

	Pension Benefit Plans		Other Benefit Plans	
(in millions)	2009	2008	2009	2008
Net expense	\$ 5	\$ 3	\$ 24	\$ 24

(b) Information about BC Hydro's benefit plans as at March 31, in aggregate, is as follows:

	Pension Benefit Plans		Other Benefit Plans	
(in millions)	2009	2008	2009	2008
Accrued benefit obligation	\$ 2,183	\$ 2,633	\$ 188	\$ 221
Fair value of plan assets	1,902	2,554	—	—
Plan deficit	\$ (281)	\$ (79)	\$ (188)	\$ (221)
Unamortized net actuarial losses	574	348	(28)	12
Unamortized past service costs	5	6	—	—
Unamortized transition (asset) liability	(45)	(60)	19	26
Accrued benefit asset (liability)	\$ 253	\$ 215	\$ (197)	\$ (183)

Represented by:

	2009	2008	2009	2008
Accrued benefit asset	\$ 337	\$ 295	\$ —	\$ —
Accrued benefit liability	(84)	(80)	(197)	(183)
	\$ 253	\$ 215	\$ (197)	\$ (183)

The net accrued benefit liability is included in Other Long-Term Liabilities (Note 15) and the pension asset is included in other assets and deferred charges.

The pension plan assets and obligations are measured as at December 31, 2008. The other benefit plan obligations are measured as at March 31, 2009. No valuation allowance was required in fiscal 2009 and fiscal 2008. Only the statutory pension plan was fully funded in fiscal 2008 and no benefit plans were fully funded in fiscal 2009.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

(c) The significant assumptions adopted in measuring BC Hydro's accrued benefit obligations are as follows:

	Pension Benefit Plans		Other Benefit Plans	
	2009	2008	2009	2008
Discount rate				
Benefit cost	5.5%	5.5%	5.85%	5.5%
Accrued benefit obligation	7.35%	5.5%	7.70%	5.85%
Expected long-term rate of return on plan assets	7.5%	7.2%	n/a	n/a
Rate of compensation increase				
Benefit cost	3.8%	3.8%	n/a	n/a
Accrued benefit obligation	3.8%	3.8%	n/a	n/a
Health care cost trend rates				
Weighted average health care cost trend rate	n/a	n/a	5.5%	6.4%
Weighted average ultimate health care cost trend rate	n/a	n/a	3.9%	3.9%
Year ultimate health care cost trend rate will be achieved	n/a	n/a	2013	2013

(d) Other information about BC Hydro's benefit plans is as follows:

(in millions)	Pension Benefit Plans		Other Benefit Plans	
	2009	2008	2009	2008
Employer contributions	\$ 36	\$ 49	\$ —	\$ —
Employee contributions	\$ 21	\$ 17	\$ —	\$ —
Benefits paid	\$ 127	\$ 121	\$ 10	\$ 10
Settlement payments	\$ 6	\$ 9	\$ —	\$ —

The actuarial valuation as at December 31, 2006 that was completed in September 2007, revealed a specific funding requirement of approximately \$18 million. BC Hydro made the \$18 million payment during fiscal 2008. This amount represents a funding commitment to fulfill certain requirements specified by the *BC Pension Benefits Standards Act* related to the unlikely event that BC Hydro ceases to operate, and are designated as contributions to the BC Hydro pension plan. Amounts contributed are in addition to existing funding commitments and do not materially impact operating results in the period in which the payments are made.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

(e) Asset allocation of the defined benefit statutory pension plan as at the measurement date:

	Target Allocation	2009	2008
Equities	60%	58%	56%
Fixed income investments	30%	30%	31%
Real estate	10%	12%	13%

Plan assets are re-balanced within ranges around target applications. The expected return on plan assets is determined by considering long-term historical returns, future estimates of long-term investment returns and asset allocations.

## NOTE 17: OTHER COMPREHENSIVE INCOME (LOSS) AND ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

### OTHER COMPREHENSIVE INCOME (LOSS)

(in millions)	2009	2008
<b>Other Comprehensive Income (Loss)</b>		
Unrealized loss on sinking fund balances	\$ —	\$ (4)
Reclassification to income of loss on sinking funds	—	3
Unrealized gain (loss) on derivatives designated as cash flow hedges	151	(68)
Reclassification to income on derivatives designated as cash flow hedges	(249)	145
<b>Other Comprehensive Income (Loss)</b>	<b>\$ (98)</b>	<b>\$ 76</b>

Comprehensive income consists of net income and other comprehensive income (OCI). OCI represents the changes in shareholder's equity during a period arising from transactions and changes in the fair value of available for sale securities and the effective portion of cash flow hedging instruments. Amounts are recorded in OCI until the criteria for recognition in the consolidated statement of operations are met.

### ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

(in millions)	2009	2008
Accumulated other comprehensive income (loss), beginning of period	\$ 56	\$ (20)
Other comprehensive income (loss) for the period	(98)	76
<b>Accumulated Other Comprehensive Income (Loss), End of Period</b>	<b>\$ (42)</b>	<b>\$ 56</b>

## NOTE 18: COMMITMENTS AND CONTINGENCIES

### ENERGY COMMITMENTS

BC Hydro (excluding Powerex) has long-term energy purchase contracts to meet a portion of its expected future domestic electricity requirements. The minimum obligations to purchase energy under these contracts have a total value of approximately \$16,889 million of which approximately \$2,410 million relates to the purchase of natural gas and natural gas transportation contracts, at market prices over 30 years. The remaining commitments are at predetermined prices. Powerex has energy purchase commitments with an estimated minimum payment obligation of \$4,931 million extending to 2025 and purchase commitments for energy and capacity services with a value of \$428 million extending to 2014.

The total combined payments for the next five years are approximately (in millions): 2010 - \$1,364; 2011 - \$1,395; 2012 - \$1,399; 2013 - \$1,293; 2014 - \$1,249.

Powerex has energy sales commitments over the next five years with a total estimated value of \$2,418 million.

### LEASE AND SERVICE AGREEMENTS

BC Hydro has entered into various agreements to lease facilities or assets, or to purchase business support services. The agreements cover periods of up to 10 years, and the aggregate minimum payments are approximately \$573 million. Payments for the next five years are approximately (in millions): 2010 - \$144; 2011 - \$141; 2012 - \$139; 2013 - \$137; 2014 - \$7.

### HOME PURCHASE OFFER PROGRAM

As of March 31, 2009, purchase agreements for 104 properties have been finalized under the Home Purchase Offer Program. The commitment in connection with these agreements total approximately \$62 million. The acquisition of these properties is expected to close between April 1 and September 30, 2009.

### LEGAL CONTINGENCIES

a) Since 2000, Powerex has been named, along with other energy providers, in lawsuits and U.S. federal regulatory proceedings which seek damages and/or contract rescissions based on allegations that, during part of 2000 and 2001, the California wholesale electricity markets were unlawfully manipulated and energy prices were not just and reasonable. Powerex has obtained dismissals of all but one of the lawsuits. In the remaining lawsuit, the California Department of Water Resources (CDWR) has claimed that it was forced under duress to enter into numerous transactions with Powerex in 2001. The trial in the CDWR litigation is scheduled to begin on May 18, 2010 in federal court. If CDWR is successful at trial the case will then go to the Federal Energy Regulatory Commission (FERC) to determine appropriate remedies.

FERC has approved a settlement agreement between FERC staff and Powerex that acknowledged that there was no evidence that Powerex engaged in any gaming or other improper practices with any other market participants, and further noted that Powerex was a valuable and reliable supplier to the California market throughout the energy crisis. FERC's approval of this settlement is currently being challenged by various California parties. If the challenges are unsuccessful, FERC's determination that Powerex did not engage in market manipulation will stand and could provide Powerex with additional defences in the remaining litigation and other FERC proceedings.



BRITISH COLUMBIA HYDRO AND POWER AUTHORITY  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED MARCH 31, 2009 AND 2008

FERC decided earlier in the proceedings that certain market-wide refunds will have to be paid by energy providers to various California parties. The precise amount has not been determined and the timing of the refunds is unknown. In addition, FERC has been ordered by the Ninth Circuit to reconsider additional refunds based on allegations of seller market manipulation and on quarterly reporting deficiencies. CDWR transactions will be included in these latter inquiries.

At March 31, 2009, Powerex was owed US \$263 million [CDN \$332 million] by the California Power Exchange [Cal Px] and the California Independent System Operator [CAISO] related to Powerex's electricity trade activities in California during the period covered by the lawsuits. As a result of defaults by a number of California utilities, the Cal Px and CAISO were unable to pay these amounts to Powerex. It is expected those receivables will be offset against any refunds that Powerex is required to pay.

Due to the ongoing nature of the regulatory and legal proceedings against Powerex, management cannot predict the outcomes of the claims against Powerex. Powerex has recorded provisions for uncollectible amounts and legal costs associated with the California energy crisis. These provisions are based on management's best estimates, and are intended to adequately provide for any exposure. However, the amounts that are ultimately collected or paid may differ from management's current estimates. Management has not disclosed the provision amounts or ranges of expected outcomes due to the potentially adverse effect on the process.

- b) Facilities and Rights of Way: BC Hydro is subject to existing and pending legal claims relating to alleged infringement and damages in the operation and use of facilities owned by BC Hydro. These claims may be resolved unfavourably with respect to BC Hydro and may have a significant adverse effect on BC Hydro's financial position. For existing claims in respect of which settlement negotiations have advanced to the extent that potential settlement amounts can reasonably be predicted, management has recorded a provision for the potential costs of those settlements. For pending claims, management believes that any loss exposure that may ultimately be incurred may differ materially from management's current estimates. Management has not disclosed the ranges of expected outcomes due to the potentially adverse effect on the negotiation process for these pending claims.
- c) Due to the size, complexity and nature of BC Hydro's operations, various other legal matters are pending. It is not possible at this time to predict with any certainty the outcome of such litigation. Management believes that any settlements related to these matters will not have a material effect on BC Hydro's consolidated financial position or results of operations.

## NOTE 19: GEOGRAPHIC INFORMATION

Revenues, based on point of delivery, are as follows:

<i>(in millions)</i>	2009	2008
British Columbia	\$ 2,824	\$ 2,948
Canada (excluding British Columbia)	373	234
United States	1,072	1,028
Total	\$ 4,269	\$ 4,210

Substantially all of BC Hydro's assets are located in the Province of British Columbia. Energy sales outside of British Columbia are carried out by Powerex, a wholly owned subsidiary of BC Hydro. The fiscal 2008 balances have been restated to reflect location of the customer, rather than the previous allocation which was based on point of delivery.

## NOTE 20: RELATED PARTY TRANSACTIONS

As Crown Corporations of the Province, BC Hydro, BCTC and the Province are considered related parties. As a regulatory agency of the Province, BCUC would also be considered a related party of BC Hydro as both organizations are subject to common significant influence by the Province. All transactions between BC Hydro and its related parties are considered to possess commercial substance and are consequently recorded at the exchange amount, which is the amount of consideration established and agreed to by the related parties. The related party transactions are summarized below:

<i>(in millions)</i>	2009	2008
Province of BC		
Accounts receivable	\$ 92	\$ 63
Accounts payable	53	354
Water rental fees	310	318
Cost of energy sales	229	245
Taxes	108	99
Finance charges	472	463
Payment to the Province	288	331
BCTC		
Accounts receivable	\$ 56	\$ 58
Accounts payable	49	47
Cost of energy sales	77	59
Operating costs	91	87
Other	53	35
Columbia Power Corporation		
Accounts payable	1	6
Cost of energy sales	53	45

BC Hydro's debt is either held or guaranteed by the Province (see Note 12). Under an agreement with the Province, BC Hydro indemnifies the Province for any credit losses incurred by the Province related to interest rate and foreign currency contracts entered into by the Province on BC Hydro's behalf. At March 31, 2009, the aggregate exposure under this indemnity totaled approximately \$78 million (2008 - \$158 million). BC Hydro has not experienced any losses to date under this indemnity.

## NOTE 21: PRIOR PERIOD ERROR

BC Hydro's subsidiary Powerex has identified a balance sheet classification error in the prior year financial statements relating to the presentation of its derivative commodity assets and liabilities. Derivative commodity assets and liabilities under the same Master Netting Agreement were previously presented in the balance sheet on a net basis. However, as Powerex only had the legal right to offset these transactions in the event of default and did not have the legal right to offset these transactions at the reporting date, the derivative commodity assets and liabilities should have been presented on the balance sheet on a gross basis.

Prior year balances have been restated to correct the presentation error, resulting in an increase to the current portion of derivative financial instrument assets and liabilities of \$478 million and non-current derivative financial instrument assets and liabilities of \$64 million.

# FINANCIAL AND OPERATING STATISTICS

## FINANCIAL STATISTICS

for the years ended or as at March 31 (millions of dollars)

	2009	2008	2007	2006	2005
<b>Revenues</b>	<b>\$ 4,269</b>	<b>\$ 4,210</b>	<b>\$ 4,192</b>	<b>\$ 4,311</b>	<b>\$ 3,725</b>
<b>Expenses</b>					
Energy costs	2,393	2,057	2,117	2,488	1,959
Operating costs <sup>1</sup>	915	942	716	805	717
Amortization	394	368	378	411	410
Taxes	167	153	149	147	143
Finance charges	472	463	453	435	318
Payment from Alcan Inc.	—	—	—	—	(137)
	4,341	3,983	3,813	4,286	3,410
<b>Income Before Regulatory Account Transfers</b>	<b>(72)</b>	<b>227</b>	<b>379</b>	<b>25</b>	<b>315</b>
Regulatory Transfers	438	142	28	241	87
<b>Net Income</b>	<b>\$ 366</b>	<b>\$ 369</b>	<b>\$ 407</b>	<b>\$ 266</b>	<b>\$ 402</b>
<b>Property, Plant and Equipment &amp; Intangible Assets</b>					
At cost	\$ 19,535	\$ 18,262	\$ 17,161	\$ 16,699	\$ 16,197
Less: Accumulated depreciation	7,395	7,108	6,735	6,676	6,264
<b>Net Book Value</b>	<b>\$ 12,140</b>	<b>\$ 11,154</b>	<b>\$ 10,426</b>	<b>\$ 10,023</b>	<b>\$ 9,933</b>
<b>Property, Plant &amp; Equipment and Intangible Asset Additions</b>					
Sustaining	\$ 667	\$ 557	\$ 428	\$ 363	\$ 331
Expansion	733	519	379	247	197
Total property, plant & equipment and intangible asset additions <sup>2</sup>	1,400	1,076	807	610	528
Less: Contributions in aid of construction	97	100	85	68	66
<b>Net Property, Plant &amp; Equipment and Intangible Asset Additions</b>	<b>\$ 1,303</b>	<b>\$ 976</b>	<b>\$ 722</b>	<b>\$ 542</b>	<b>\$ 462</b>
<b>Net Long-Term Debt <sup>3</sup></b>	<b>\$ 9,135</b>	<b>\$ 7,519</b>	<b>\$ 6,916</b>	<b>\$ 6,627</b>	<b>\$ 6,583</b>

<sup>1</sup> Maintenance, operations and administrative costs.

<sup>2</sup> Total property, plant and equipment and intangible asset expenditures include non-cash items.

<sup>3</sup> Consists of long-term debt, including the current portion, net of sinking funds and cash and cash equivalents.

## KEY FINANCIAL AND OPERATING COMPARATIVES

**Financial Comparatives***(millions of dollars unless otherwise stated)*

	2009	2008	2007	2006	2005
Revenues	\$ 4,269	\$ 4,210	\$ 4,192	\$ 4,311	\$ 3,725
Net income	\$ 366	\$ 369	\$ 407	\$ 266	\$ 402
Property, Plant & Equipment and Intangibles	\$ 12,140	\$ 11,154	\$ 10,426	\$ 10,023	\$ 9,933
Net long-term debt <sup>1</sup>	\$ 9,135	\$ 7,519	\$ 6,916	\$ 6,627	\$ 6,583
Retained earnings	\$ 2,231	\$ 1,865	\$ 1,783	\$ 1,707	\$ 1,688
Property, Plant & Equipment and Intangible Additions	\$ 1,400	\$ 1,076	\$ 807	\$ 610	\$ 528
Debt to equity ratio, as defined for regulatory purposes	81 : 19	70 : 30	70 : 30	70 : 30	70 : 30
Return on equity (%), as defined for regulatory purposes	11.75	11.33	13.44	9.26	14.24
Interest coverage	0.78	1.49	1.84	1.06	1.56

**Operating Comparatives**

Number of customers	1,801,328	1,767,194	1,736,987	1,704,892	1,675,258
Generating capacity (MW):					
Hydroelectric	10,242	10,237	10,232	10,219	10,218
Thermal	1,088	1,089	1,091	1,094	1,093
Peak one-hour demand (MW)	10,011	9,548	10,113	9,317	9,437
Average annual kW-h use per residential customer	11,258	11,290	10,906	10,846	10,722
Average number of customers per employee	294	338	373	399	378
Domestic sales (GW-h)	52,512	53,300	52,911	52,440	51,205
Trade sales (GW-h)	50,799	51,815	41,336	36,547	32,346
Total electricity sold per employee (GW-h)	13.99	17.66	18.70	19.45	18.41

<sup>1</sup> Consists of long-term debt, including the current portion, net of sinking funds and cash and cash equivalents.

## OPERATING STATISTICS

*for the years ended or as at March 31*

	2009	2008	2007	2006	2005
<b>Generating Capacity (megawatts)</b>					
Hydroelectric <sup>1</sup>	10,242	10,237	10,232	10,219	10,218
Thermal	1,088	1,089	1,091	1,094	1,093
Total	11,330	11,326	11,323	11,313	11,311
<b>Peak One-Hour Demand Integrated System (megawatts)</b>	10,011	9,548	10,113	9,317	9,437
<b>Customers</b>					
Residential	1,606,156	1,568,508	1,540,176	1,511,435	1,484,339
Light industrial and commercial	191,286	194,861	193,070	189,764	187,313
Large industrial	162	160	146	146	138
Other	3,434	3,408	3,349	3,326	3,265
Trade	290	257	246	221	203
Total	1,801,328	1,767,194	1,736,987	1,704,892	1,675,258
<b>Electricity Sold (gigawatt-hours)</b>					
Residential	17,861	17,553	16,651	16,261	15,814
Light industrial and commercial	18,265	18,406	18,268	17,913	17,459
Large industrial	14,303	15,380	15,989	16,428	16,177
Other	2,083	1,961	2,003	1,838	1,755
Domestic	52,512	53,300	52,911	52,440	51,205
Trade	50,799	51,815	41,336	36,547	32,346
Total	103,311	105,115	94,247	88,987	83,551
<b>Domestic Change Over Previous Year (%)</b>	(1.5)	0.7	0.9	2.4	2.1
<b>Revenues (millions)</b>					
Residential	\$ 1,197	\$ 1,171	\$ 1,070	\$ 1,046	\$ 1,016
Light industrial and commercial	1,054	1,054	1,025	989	967
Large industrial	481	536	556	584	573
Other energy sales	82	183	135	108	198
Domestic	2,814	2,944	2,786	2,727	2,704
Trade	1,455	1,266	1,406	1,584	1,021
Total	\$ 4,269	\$ 4,210	\$ 4,192	\$ 4,311	\$ 3,725

## OPERATING STATISTICS (CONTINUED)

<i>for the years ended or as at March 31</i>	2009	2008	2007	2006	2005
<b>Average Revenue (per kilowatt-hour)</b>					
Residential	6.7 ¢	6.7 ¢	6.4 ¢	6.4 ¢	6.4 ¢
Light industrial and commercial	5.8	5.7	5.6	5.5	5.5
Large industrial	3.4	3.5	3.5	3.6	3.5
Other	5.3	6.5	4.9	5.0	5.0
Trade <sup>2</sup>	6.6	6.5	6.5	7.8	9.7
<b>Average Annual Kilowatt-Hour</b>					
Use Per Residential Customer	11,258	11,290	10,906	10,846	10,722
<b>Lines In Service</b>					
Distribution (kilometres)	56,780	56,297	55,705	55,224	55,254
Transmission (circuit kilometres)	18,531	18,531	18,336	18,234	18,286
<b>Number of Employees <sup>3</sup></b>	5,844	5,185	4,546	4,203	4,396

<sup>1</sup> Maximum sustained generating capacity.

<sup>2</sup> The method used to calculate the trade revenue per kilowatt hour is based on gross trade revenues.

<sup>3</sup> Includes full time and part-time employees of BC Hydro and its subsidiaries.



# OPERATING SEGMENT INFORMATION

## TOTAL REQUIREMENTS FOR ELECTRICITY AND SOURCES OF SUPPLY

for the years ended March 31

	2009			2008			2007			2006		2005	
	Generating Capacity (Megawatts)	Gigawatt- Hours	%	Generating Capacity (Megawatts)	Gigawatt- Hours	%	Generating Capacity (Megawatts)	Gigawatt- Hours	%	Gigawatt- Hours	%	Gigawatt- Hours	%
<b>Requirements</b>													
Domestic	11,330	52,512	58.2	11,326	53,300	55.4	11,323	52,911	57.8	52,440	59.8	51,205	59.8
Electricity trade		32,504	36.0		37,450	38.9		33,372	36.4	29,906	34.1	29,706	34.7
		85,016	94.2		90,750	94.3		86,283	94.2	82,346	93.9	80,911	94.5
Line loss and system use		5,241	5.8		5,487	5.7		5,329	5.8	5,356	6.1	4,660	5.5
		90,256	100.0		96,237	100.0		91,612	100.0	87,702	100.0	85,571	100.0
<b>Sources of Supply</b>													
<b>Hydroelectric generation</b>													
Gordon M. Shrum	2,730	15,287	17.0	2,730	16,477	17.1	2,730	12,470	13.6	14,628	16.7	11,738	13.7
Revelstoke	1,980	6,955	7.7	1,980	9,496	9.9	1,980	7,740	8.4	7,915	9.0	7,283	8.5
Mica	1,805	5,695	6.3	1,805	8,562	8.9	1,805	7,036	7.7	7,006	8.0	5,993	7.0
Kootenay Canal	583	2,507	2.8	583	3,083	3.2	580	3,286	3.6	3,300	3.8	3,339	3.9
Peace Canyon	694	3,801	4.2	694	4,054	4.2	694	3,054	3.3	3,580	4.1	2,981	3.5
Seven Mile	805	3,306	3.7	805	2,880	3.0	805	3,573	3.9	3,082	3.5	3,039	3.6
Bridge River	478	2,360	2.6	478	2,793	2.9	476	2,609	2.8	2,736	3.1	2,597	3.0
Other	1,167	3,901	4.3	1,162	4,795	5.0	1,162	4,708	5.1	4,603	5.2	4,631	5.4
	10,242	43,812	48.6	10,237	52,140	54.2	10,232	44,476	48.5	46,850	53.4	41,601	48.6
<b>Thermal generation</b>													
Burrard	950	116	0.1	950	260	0.3	950	727	0.8	39	—	456	0.5
Other	138	196	0.2	139	163	0.2	141	333	0.4	336	0.4	325	0.4
<b>Purchases under long-term commitments</b>													
		12,359	13.7		11,878	12.3		10,306	11.2	11,275	12.9	10,992	12.9
<b>Purchases under short-term commitments</b>													
		33,237	36.8		32,281	33.5		35,360	38.6	29,831	34.0	32,637	38.1
Exchange net		536	0.6		(485)	(0.5)		410	0.4	(629)	(0.7)	(440)	(0.5)
	11,330	90,256	100.0	11,326	96,237	100.0	11,323	91,612	100.0	87,702	100.0	85,571	100.0

## PROGRESS AGAINST SHAREHOLDERS' LETTER OF EXPECTATION THE SHAREHOLDER'S LETTER OF EXPECTATIONS

The Shareholders' Letter of Expectations describes the relationship between BC Hydro and the Province, and sets out objectives the shareholder wishes BC Hydro to achieve. The Province and BC Hydro review the letter annually and update it as required.

Directions outlined in the letter for which this Annual Report is referring, dated May 2008, focus on accountability, energy conservation, climate change, stakeholder consultation, private sector support, supply options, electricity trading and government relations. The current letter can be found at [www.bchydro.com/about/company\\_information/openness\\_accountability.html](http://www.bchydro.com/about/company_information/openness_accountability.html).

OUTLINED BELOW IS HOW BC HYDRO HAS RESPONDED TO EACH OF THE SHAREHOLDERS' EXPECTATIONS.

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### BC Hydro shall:

Conduct its affairs to achieve its mandate and the performance expectations and objectives of the Shareholder, including establishing plans and implementing corporate strategies, programs, plans and financial outcomes that are consistent with the Shareholder's general direction and consistent with principles of efficiency, effectiveness, and customer service.

### BC Hydro Action

Annually, BC Hydro prepares a Service Plan, and Quarterly Reports, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: [www.bchydro.com/about/company\\_information/reports.html](http://www.bchydro.com/about/company_information/reports.html).

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### BC Hydro shall:

Prepare Service Plans with clearly articulated goals, objectives, strategies and performance measures and targets, and Annual Reports that detail progress toward achieving those goals, and post both documents on its website.

### BC Hydro Action

[www.internal.bchydro.com/about/company\\_information/reports.html](http://www.internal.bchydro.com/about/company_information/reports.html) has both the Annual Report and the Service Plan. In addition, the G3 Report, Quarterly Reports and supplemental reports are posted online, as appropriate.

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### BC Hydro shall:

Display all annual Statement of Financial Information schedules prepared under the *The Financial Information Act* in an easily accessible location on its website.

### BC Hydro Action

[www.internal.bchydro.com/about/company\\_information.html](http://www.internal.bchydro.com/about/company_information.html). BC Hydro's financial information is released through its Annual Report. These are posted online.

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### BC Hydro shall:

Conduct its operations and financial activities in a manner consistent with the legislative, regulatory and policy framework established by the Shareholder.

### BC Hydro Action

This Annual Report reports on how we have remained consistent with the legislative, regulatory and policy framework established by the Shareholder.

# APPENDICES

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## BC Hydro shall

Develop and implement strategies to manage risks identified in the Service Plan.

## BC Hydro Action

BC Hydro's operations involve a broad spectrum of risks ranging from those commonly associated with any business to catastrophic societal loss risks that would have severe effects on entire regions. The key risks BC Hydro faces are divided into six categories for management purposes: employee, public and dam safety; reliability; financial performance; regulatory; organization risk; and environmental. See Financial Notes for information on our specific areas of risk.

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## BC Hydro shall

Comply with the Shareholder's requirements to make the public sector carbon neutral by 2010, including: accurately defining, measuring, reporting on and verifying the greenhouse gas emissions from the Corporation's operations; implementing aggressive measures to reduce those emissions and reporting on these reduction measures and reduction plans; and offsetting any remaining emissions through investments in the Pacific Carbon Trust, which will invest in greenhouse gas reduction projects outside of the Corporation's scope of operations.

## BC Hydro Action

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the unavoidable physical impacts of climate change. For more information on our strategy see page 46 of the Report on Performance.

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## BC Hydro shall

Encourage staff involvement in developing ideas, and new solutions to meet Government's climate change objectives, including energy conservation programs and fleet and traffic management initiatives and report on results achieved.

## BC Hydro Action

This past year, our Lead by Example program continued to develop BC Hydro's own conservation initiatives for employees and our facilities. From behaviour programs to capital projects to policy direction, we continue to promote energy efficiency and conservation with programs designed to instill a conservation culture both at home and at work. In addition to other facility upgrades, lighting and heating (HVAC) projects were undertaken at several of our generating stations, including Mica and Seven Mile. We have also developed updated energy efficiency and workplace environment standards for any new buildings and refurbishments.

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## BC Hydro shall

Provide the Shareholder with reports and other information that would enable the Shareholder to carry out its responsibilities.

## BC Hydro Action

Annually, BC Hydro prepares a Service Plan, Quarterly Reports and the Annual Report, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: [www.bchydro.com/about/company\\_information/reports.html](http://www.bchydro.com/about/company_information/reports.html).

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## BC Hydro shall

Provide information to the Shareholder if BC Hydro is unable to meet the targets as identified in the Service Plan.

## BC Hydro Action

Annually, BC Hydro prepares Quarterly Reports, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: [www.bchydro.com/about/company\\_information/reports.html](http://www.bchydro.com/about/company_information/reports.html).

# APPENDICES

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## BC Hydro shall

Continually review and improve its organization structure to enhance accountability, cost effectiveness and performance.

## BC Hydro Action

See page 12 of Corporate Governance to see the latest organization structure and changes that have been made in the last year.

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## BC Hydro shall

Aggressively pursue all actions necessary to implement the objectives of the BC Energy Plan; continue to provide Government with a monthly progress report on key initiatives and as a summary of annual progress on environmental leadership, innovation, energy conservation and efficiency, and energy security and self-sufficiency in BC Hydro's Annual Report to the Shareholder.

## BC Hydro Action

See the Report on Performance. Climate Change, Electricity Conservation and Efficiency on page 41.

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## BC Hydro shall

Proactively provide public information and education regarding the supply of and the demand for electricity and options for meeting future needs in consultation with Government.

## BC Hydro Action

See [www.bchydro.com](http://www.bchydro.com).

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## BC Hydro shall

Through its subsidiary Powerex, actively pursue extra-provincial energy trading markets and explore and identify opportunities to facilitate access for Independent Power Producers to western North American markets.

## BC Hydro Action

Powerex continues its energy marketing and trade activities including buying and supplying wholesale power, natural gas, ancillary services, financial energy products, and, more recently, environmental products with an ever-expanding list of trade partners. These activities help optimize BC Hydro's electric system resources and provide significant economic benefits to British Columbians.

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## BC Hydro shall

Advise and consult with the Shareholder in advance of any anticipated or desired BC Hydro initiatives that could have public policy implications.

## BC Hydro Action

Ongoing through regular formal and informal updates to the Shareholder.

## LEGISLATION AND GOVERNMENT EXPECTATIONS

### Legislation

Two key provincial legislative statutes enable BC Hydro's operations: the *Hydro and Power Authority Act*, which established BC Hydro and our general powers and governance and the *Utilities Commission Act*, which created the BC Utilities Commission (BCUC) and established the framework for regulation of public utilities. The BCUC is responsible for ensuring that customers receive safe, reliable and non-discriminatory energy services at fair rates from the utilities it regulates, that shareholders of these utilities are afforded a reasonable opportunity to earn a fair return on their invested capital, and that the competitive interests of B.C. businesses are not frustrated.

BC Hydro's assets also come under the terms of the *BC Hydro Public Power Legacy and Heritage Contract Act*. This act enabled the establishment of the Heritage Contract and ensures public ownership of BC Hydro's Heritage Resources, which includes BC Hydro's transmission and distribution systems, and all of BC Hydro's existing generation and storage assets. The act also includes any future increases to the capacity and energy capability of these facilities.

## APPENDICES

### Recent Legislation

On November 29, 2007, the B.C. Government passed Bill 44, the *Greenhouse Gas Reduction Targets Act*. The act puts into law British Columbia's target of reducing greenhouse gas (GHG) emissions by at least 33 per cent below 2007 levels by 2020, and by at least 80 per cent below 2007 levels by 2050.

The act requires provincial ministries and agencies, schools, colleges, universities, health authorities and Crown corporations (including BC Hydro) to become carbon neutral by 2010 and to make public a report every year detailing the actions (including changes to facilities, vehicle fleets and procurement, but excluding travel) they have taken towards carbon neutrality.

During 2008, the B.C. Government passed several new pieces of legislation relevant to BC Hydro:

- The *Greenhouse Gas Reductions (Cap and Trade) Act*, which establishes a cap and trade regulatory system, and amendments to the *Greenhouse Gas Reduction Act (Emissions Standards)*, which set into law the BC Energy Plan's requirement for zero net emissions from new and existing (in 2016) electricity projects.
- The *Utilities Commission Amendment Act* received Royal Assent on May 1, 2008. The amendments align the *Utilities Commission Act* with the BC Energy Plan's objectives and require the BCUC to consider, among other objectives, the goals of:
  - > reducing GHG emissions,
  - > pursuing energy conservation and efficiency,
  - > producing and acquiring electricity from clean or renewable resources,
  - > providing technology and information to customers to help them conserve, and implement several other policy actions from the BC Energy Plan.
- The *Carbon Tax Act* came into effect on July 1, 2008. The carbon tax applies to fossil fuels, including gasoline, diesel, natural gas, coal, propane and home heating fuel, and is intended to encourage individuals and businesses to make more environmentally responsible choices, reduce their use of fossil fuels and thus reduce GHG emissions.

### The BC Energy Plan

Value for the shareholder extends beyond the financial expectations outlined above to include such other attributes as reputation and delivering on the the BC Energy Plan. Reputational value includes the ability to provide and maintain an acceptable standard of living for British Columbians, and integral to this is providing reliable energy at competitive rates.

On February 27, 2007, the B.C. Government released the BC Energy Plan. The BC Energy Plan provides further clarity on value as it seeks to make the province energy self-sufficient while taking responsibility for our natural environment and climate. These attributes are balanced by the financial expectations which ensure that we focus on operating efficiently and effectively while delivering shareholder value.

The BC Energy Plan looks to all forms of clean alternative energy—as well as energy conservation and efficiency—in meeting the future energy needs of British Columbians.

The plan sets a goal for BC Hydro to acquire 50 per cent of incremental resource needs through energy conservation and efficiency by 2020, while at the same time requiring that:

- all new electricity projects developed in B.C. will have zero net greenhouse gas emissions;
- existing thermal generation power plants will reach zero net greenhouse gas emissions by 2016;
- there will be zero greenhouse gas emissions from coal-fired electricity generation;
- clean or renewable electricity generation will continue to account for at least 90 per cent of total provincial generation, placing the province among the top jurisdictions in the world; and
- the province will be electricity self-sufficient by 2016.

# APPENDICES

## GUIDING PRINCIPLES

The Guiding Principles, reflecting the following language, are available in BC Hydro's 2009/2010 - 2011/2012 Service Plan.

Reliability (Customer)	To provide best-in-class reliability by customer segment.
Electricity Security (Supply)	To meet all domestic needs.
Remote Community Electrification	To provide appropriate electric service to all remote communities on an equitable basis.
Financial Targets	To maintain low costs for electricity customers in B.C. over the long-term while consistently delivering 100 per cent of forecast net income.
Innovation and Technology	To be an industry leader in innovative use of technology, directly supporting and advancing BC Hydro's long-term goals.
Western Opportunities	To profitably increase Western market share based on access to assets in B.C. and the Western system and increased trading activity.
Environmental Impact	To have no net incremental environmental impact by 2024 when compared with 2004.
Energy Conservation and Efficiency	To develop and foster a conservation culture in B.C. that leads to customers to choose a dramatic and permanent reduction in electricity intensity.
Safety	To provide the safest work environment compared with the best performers in any industry, with none of our employees experiencing a serious safety injury.
Teamwork	To use exceptional teamwork to engage all employees in the achievement of BC Hydro's purpose and long-term goals.
Workplace	To be a top employer for generations.
Customer Satisfaction	To lead other companies in offering extraordinary value and service.
Suppliers	To ensure 100 per cent of suppliers have demonstrated values congruent with those of BC Hydro.
Stakeholder Engagement	To be the most respected company in B.C.
First Nations	To improve relationships built on mutual respect and that appropriately reflect the interests of First Nations.



# APPENDICES

## CAPITAL PROJECTS

BC Hydro classifies capital expenditures as either sustaining capital or growth capital:

- Sustaining capital is required to meet targeted levels of customer and supply reliability. It includes expenditures to ensure the continued availability and reliability of our generation and distribution facilities. It also includes expenditures to support the business, such as vehicles and information technology.
- Growth capital is required to meet customer load growth and other business investments. It includes expenditures related to the expansion of existing generation assets as well as expansion and reinforcement of our distribution system. The scope and timing of growth projects are uncertain as it is dependent on economic activity and customer demand.

BC Hydro, as the owner of the transmission system operated by the British Columbia Transmission Corporation (BCTC), funds the capital expenditures incurred by the BCTC and includes these costs in our capital expenditures. Transmission capital projects are discussed in the BCTC's Service Plan.

BC Hydro's Guiding Principles and short-term priorities provide the basis to ensure that specific projects are aligned with our overall strategic direction. We then evaluate projects based on their ability to mitigate risk and/or enhance value to BC Hydro's operations. BC Hydro follows both a top-down and a bottom-up approach in our capital planning. This ensures that individual capital plans do not exceed the overall BC Hydro capacity for capital expenditures, and that all the necessary capital expenditures are undertaken to meet performance targets.

BC Hydro uses a staged decision-making process for capital projects to control costs and manage risks. In the Project Identification Phase, we review the alternatives, evaluate feasibility, and develop a preliminary business case to determine whether or not to proceed to the Definition Phase. In the Definition Phase, we fully investigate the selected alternative, complete any regulatory requirements and update the business case. If the business case is approved, we move on to the Implementation Phase where we complete the detailed design, procure equipment, construct and commission the project. Throughout these phases, as more and more information becomes available, the project scope and costs may change significantly. Costs may also change to reflect any changes in inflation rates, the labour market, and construction costs. This cost uncertainty will remain in place until the project is complete, but diminishes as scope is defined and contracts are let. Occasionally, additional information may cause us to defer a project.

## APPROVED PROJECTS OVER \$50 MILLION

The following major projects were underway or completed during fiscal 2009.

### Aberfeldie Redevelopment

BC Hydro completed installation of the first generating unit in December 2008. The new 24 MW generating plant replaces the original facility built in 1922. The remaining two units were completed in May 2009.

### Cochetopa Dam Seismic Improvement Project

BC Hydro completed construction of the new dam in July 2008. It meets current seismic standards and reduces risk to people living downstream in the event of an earthquake.

### Gordon M. Shrum Units 1 to 4 Stator Replacements

BC Hydro is replacing four stators at the Gordon M. Shrum (GMS) facility that are at risk of failure and where rewinding the stators is not technically feasible due to the condition of the cores. We began installing the new stators in 2007, and have completed two units as planned. Work on the third unit remains on schedule for completion in fiscal 2010. In May 2008, the BC Hydro Board of Directors approved plans to proceed with replacement of a fourth unit stator.

# APPENDICES

## Revelstoke Unit 5 Project

BC Hydro is currently installing a fifth generating unit in the plant to provide approximately 500 MW of additional, reliable capacity to meet today's and future demand to the BC Hydro system. The new generating unit will also provide additional energy, operating flexibility and reserves. The Revelstoke Generating Station was designed as a six-unit generation station. However, when the facility was constructed, only four units were installed, leaving two unit bays empty. Construction began in November 2007 and remains on schedule.

## Mica Generator Stator Replacement (Units 1-4)

BC Hydro is replacing the stator and rotor poles on each of the four units at the Mica Generating Station to reduce the risk of forced outages due to core bolt failure. We began the work in 2006. We have completed three units as planned; the fourth unit remains on schedule for completion in fiscal 2010.

## Peace Canyon Generator Stator Replacement and Rotor Modification

BC Hydro is installing four new stators and modifying existing rotors at the Peace Canyon Generating Station to address design deficiencies, reduce the risk of forced outages and make the plant safer for employees. We have completed three units as planned, and rehabilitation of the fourth unit remains on schedule for completion in fiscal 2010.

## Peace Canyon G1 - G4 Turbine Overhaul

In 2006, BC Hydro overhauled Peace Canyon Unit 4 turbine at the same time as the Unit 4 stator was replaced. This overhaul showed that components of the turbine were worn and damaged. As a result, we are overhauling the other three units to prevent further wear that would eventually have affected the reliability of these units. We have completed three units as planned, and rehabilitation of the fourth unit remains on schedule for completion in fiscal 2010.

## Cheakamus Spillway Gate Reliability Upgrade

BC Hydro is upgrading the spillway gates at the Cheakamus dam in order to reduce public and employee safety risk and to ensure Flood Discharge Reliability requirements are met. Spillway gates control the amount of water that can be discharged from the reservoir. They are generally used in times of flood to pass high inflows.

## Mica Gas Insulated Switchgear Replacement (subject to BCUC approval)

BC Hydro is planning to replace the switchgear system at the Mica Generating Station. The system uses two 500-kilovolt circuits to conduct the energy from the Mica underground powerhouse to the surface, where it transitions to transmission lines. This switchgear is aging and becoming less reliable and is prone to SF<sub>6</sub> (a greenhouse gas) leakage. We released the Gas Insulated Switchgear tender in December 2008, and intend to submit an application for regulatory approval in June 2009.

## Fort Nelson Generating Station Upgrade (subject to BCUC approval)

Adequacy of supply is a concern in the Fort Nelson area, and BC Hydro is planning to increase the generating capacity at the Fort Nelson Generating Station. Depending on the upgrade configuration selected, net capacity at the Fort Nelson facility would be increased by either 8.5 MW or 24.5 MW. We are expediting this project for a completion date as early as November 2011.

## CONTEMPLATED PROJECTS OVER \$50 MILLION

BC Hydro is contemplating the following projects over \$50 million. These projects are in the early Identification or Definition Phases and final costs are as yet uncertain. We will update interim project cost estimates as we further refine the scope of each project. These projects have not yet been approved by our Board of Directors or Management.

## Upper Columbia Capacity Additions at Mica and Revelstoke

We have commenced project definition and have filed Project Descriptions for the construction of Mica Units 5 and 6 with the BC Environmental Assessment Office and the Canadian Environmental Assessment Agency. Each additional unit would provide approximately 500 MW of capacity. No further work is being undertaken on Revelstoke Unit 6 at this time. (Both the Revelstoke and Mica Generating Stations were designed as six-unit generation stations. However, when the facilities were constructed, only four units were installed and two bays were left empty at each station.)

## APPENDICES

### *Hugh Keenleyside and Stave Falls Spillway Gate Reliability Upgrades*

BC Hydro is upgrading the spillway gates at the Hugh Keenleyside and Stave Falls dams in order to reduce public and employee safety risk and to ensure Flood Discharge Reliability requirements are met. Spillway gates control the amount of water that can be discharged from the reservoir. They are generally used in times of flood to pass high inflows.

### *Gordon M. Shrum Units 1 to 5 Turbine Rehabilitation (subject to BCUC approval)*

The runners and head covers for Units 1 to 5 have experienced cracking problems since the units went into service in the late 1960s, and one unit—Unit 3—experienced a major failure in the spring of 2008. We are planning to replace the runners to reduce the risk of runner failure, decrease maintenance costs and improve operating efficiency, and have released project tender documents to the market.

## CONTEMPLATED PROJECTS OVER \$50 MILLION – SCOPE BEING DETERMINED

BC Hydro is contemplating the following additional projects over \$50 million. Work was completed on these projects during fiscal 2009; however, the recommended solution and scope for these projects remain to be determined, and we are not in a position to provide a target completion date or a cost estimate for these projects. We will update interim project cost estimates as we further refine the scope of each project. These projects have not yet been approved by our Board of Directors or Management.

### *CAMPBELL RIVER IMPROVEMENTS*

#### *John Hart Replacement*

The aging John Hart facility, in operation since 1947, needs significant capital investment in the powerhouse and penstocks to ensure reliable long-term generation and to mitigate earthquake risk and environmental risk to fish and fish habitat. We are analyzing options to replace or rehabilitate the existing six unit, 126 MW generating station, including an integrated emergency bypass capability to minimize river flow disruption impacts to fish and fish habitat.

#### *Strathcona Seismic and Seepage Issues*

Strathcona is the upstream dam on the Campbell River and its reservoir provides the primary storage for the Campbell River system. The Strathcona intake tower, power conduit, spillway piers and the earth fill dam do not meet current seismic standards. BC Hydro is contemplating upgrades to the facility to improve public safety, system reliability and minimize environmental impacts.

### *RUSKIN DAM SEISMIC AND POWERHOUSE REHABILITATION PROJECTS*

#### *Ruskin Dam Safety Improvement*

The upper portion of the Ruskin Dam, built in 1930, does not meet current seismic standards. As an interim measure, we lowered the Hayward Lake Reservoir, behind the Ruskin Dam, by approximately two metres and anchored the most critical section of the upper dam. BC Hydro intends to upgrade the right abutment in 2009 to mitigate the public safety risk. Excavation of artefacts from a recently discovered archaeological site is underway, which may delay aspects of the right abutment construction work. BC Hydro will continue to further define the required dam rehabilitation work.

#### *Ruskin Powerhouse Improvements*

The existing 1930 Ruskin Generating Station is at the end of its service life and requires significant capital expenditures to continue to operate safely and reliably. BC Hydro is analyzing options to rehabilitate the powerhouse to meet current seismic standards for earthquakes and replace major generating equipment, which is in poor or unsatisfactory condition.

#### *Lajoie Dam Seismic Upgrade*

The Lajoie Dam is a rock fill structure completed in 1955. In recent years, annual repairs to the shotcrete surface have been required to control increased leakage as the dam settles. Because the dam does not meet current seismic standards, we are assessing seismic upgrade options to ensure dam and public safety and maintain reliability of supply.

# APPENDICES

## Alouette Generating Station Redevelopment

The 9 MW Alouette Generating Station has been in operation since 1928. Because of its age and the condition of the facility, including the fact that it does not meet current seismic standards, BC Hydro is contemplating rehabilitating or replacing both the powerhouse and the generating equipment.

## Bridge River Units 5 & 6 Generator Upgrades

BC Hydro is considering upgrading two units at Bridge River, including the replacement or refurbishment of the generators and ancillary equipment, to address the condition and known deficiencies of major components. These generators were commissioned almost 50 years ago and have not undergone a major refurbishment since being placed in service.

## Cheakamus Generator Upgrades

BC Hydro is considering upgrading the two units at Cheakamus generating station, including the replacement or refurbishment of the generators and ancillary equipment, to address the condition and known deficiencies of major components. These generators were commissioned over 50 years ago.

## Fort Nelson Generating Station Expansion

In order to meet growing customer demand in the region, BC Hydro is evaluating options for the expansion of the Fort Nelson Generating facility to further increase generating capacity in the region. Transmission options will also be considered.

## Investments in Burrard Thermal Generating Station

BC Hydro will be conducting detailed condition assessments of the Burrard Thermal Generating Station to confirm the investments required to ensure the continued reliable operation of the facility, such as the purchase of critical spare parts and control systems upgrades.

# SUBSIDIARIES

## Powerex Corp.

Powerex Corp., a wholly-owned subsidiary of BC Hydro, is a key participant in energy markets across North America, buying and supplying wholesale power, natural gas, ancillary services, financial energy products and, more recently, environmental products with an ever-expanding list of trade partners. Established in 1988, its energy marketing and trade activities help optimize BC Hydro's electric system resources and provide significant economic benefits to the people of British Columbia. The Chief Executive Officer reports to the Board of Directors of Powerex Corp., and has a reporting relationship to BC Hydro's Chief Executive Officer. BC Hydro's Chief Executive Officer ensures the Board of BC Hydro is informed of Powerex's key strategies and business activities.

For the past 10 years, Powerex has increasingly purchased electricity from outside the BC Hydro system to support BC Hydro's domestic needs and to meet its own trade commitments. Powerex also markets, on behalf of the Province, the Canadian Entitlement to the Downstream Benefits of the Columbia River Treaty.

The U.S. to Canadian dollar exchange rate and the energy markets in which Powerex trades vary, and therefore income can vary significantly from year to year. Powerex's net income over the last five years has ranged from \$83 to \$259 million.

## Powertech Labs Inc.

Powertech Labs, as a wholly-owned subsidiary of BC Hydro, has been providing consulting and testing services to electric utilities, gas companies, automotive manufacturers and others since 1989. Operating as a separate commercial entity, Powertech has combined unique testing capabilities with multidisciplinary, expert technical staff to help clients solve energy related problems. In addition to providing technical services to BC Hydro, Powertech serves a large number of clients in energy-related sectors across North America, Asia, Europe and beyond. Powertech Labs is located on an 11 acre, 21-lab campus in Surrey and has 114.5 employees as of March 31, 2009.

In 2008, a new Board of Directors was appointed which includes Mossadiq Umedaly (Executive Chair), Brenda Eaton and Dr. Nancy Olewiler. The Board directed Powertech's management team to develop a new strategic direction for Powertech that will capitalize on its core capabilities, strong industry client base and emerging market opportunities. The new strategic plan calls for Powertech to become a clean technology company, competing successfully in global markets in order to create value for BC Hydro and British Columbia.

# APPENDICES

Powertech's operating income was \$0.4 million with gross revenue of \$24.6 million in fiscal year 2009. Powertech's revenue and operating income is expected to grow as it implements its Strategic Plan.

## Other Subsidiaries

BC Hydro has created a number of other subsidiaries to help us manage risk in developing projects and/or contracting with third parties. The Boards and management of these subsidiaries are made up of BC Hydro employees, who perform these duties without additional remuneration.

## TRIPLE BOTTOM LINE REPORTING AND THE GLOBAL REPORTING INITIATIVE

BC Hydro prepares its Annual Report in compliance with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3 Guidelines). The GRI facilitates the transparency and accountability for organizations and provides stakeholders with a universally-applicable, comparable framework from which to understand disclosed information. GRI is an independent body, but remains an official collaborating centre of the United Nations Environment Programme (UNEP) and works in cooperation with United Nations Global Compact.

The GRI guidelines were developed through dialogue with a large network of stakeholders from over 60 countries which included representatives from communities such as business, accountancy, investment, environmental, human rights, research and labour organizations. GRI is now used by thousands of organizations worldwide to report on performance across the three dimensions of sustainability – financial, environmental, and social.

In 2006, BC Hydro became an Organizational Stakeholder (OS) of the Global Reporting Initiative. Organizational Stakeholders play an integral part in the GRI governance. In addition to becoming an OS member, we also participated in the development of the new Electric Utilities Sector Supplement (EUSS) guidelines which were released publicly in April 2009. The EUSS tailors GRI's Reporting Framework to the needs of the electric utility industry and includes additional sector-specific reporting guidance.

For the fiscal 2009 reporting period, BC Hydro continues the transition from the previously used 2002 GRI Sustainability Reporting Guidelines to the new G3 framework. As well, we begin to integrate some of the EUSS elements into our reporting processes.

BC Hydro's suite of sustainability performance measures is a combination of measures developed to track our achievement towards meeting our guiding principles and long-term goals as outlined in our annual Service Plan, measures derived from financial and operational statistics, and measures developed specifically to meet GRI reporting requirements.

## CONTACT US

### FOR GENERAL INFORMATION ABOUT BC HYDRO:

**Lower Mainland**

604 BCHYDRO [604 224 9376]

**Outside the Lower Mainland**

1 800 BCHYDRO [1 800 224 9376]

**[www.bchydro.com](http://www.bchydro.com)**

[customer.service@bchydro.com](mailto:customer.service@bchydro.com)

### MAILING ADDRESS FOR CORPORATE OFFICE:

BC Hydro  
333 Dunsmuir Street  
Vancouver, B.C.  
V6B 5R3

For information about BC Hydro's Annual Report or sustainability at BC Hydro, visit BC Hydro's website at [www.bchydro.com](http://www.bchydro.com).





